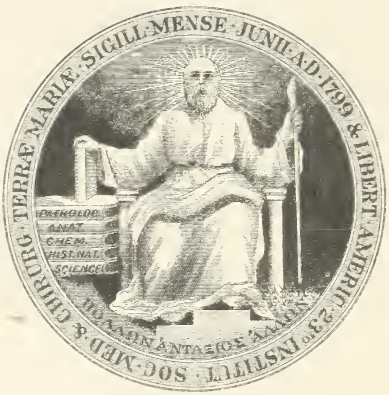

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INDEX TO VOLUME XIX.

PAGE.

Abdominal Surgery, Year's Work in..341, 361
Abnormalities of the Urachus in Infancy and Childhood..... 156
Abscesses in the Ear and Brain..... 68
Academy of Medicine, New York, Bequest to..... 115
Agaricine in the Sweating of Phthisis.... 97
Agnew, C. R., M.D.....178, 179
Agnew, D. Hayes, M.D..... 401
Aiken, W. E. A., M.D., Memoir of 291
Aiken, Wm. E. A., M.D., Resolution on the death of..... 136
Albuminuria, Cyclic or Physiological..... 94
Alcoholism, Hypnotic for use in..... 78
Alleged Restoration of Sight from a Flash of Lightning..... 377
American Association of Obstetricans and Gynæcologists..... 196
American Medical Association, Cincinnati Meeting of 56
Anæsthetics..... 301
Anæsthetics for Minor Operations..... 158
Anderson, Edward, M.D.....189, 353
Anderson, L. B, M.D., Notice of book by. 434
Aneurism, Treatment of, by Iodides and Antipyrine 419
Anomalies of Medical Life..... 338
Antidotes to Snake Bite..... 396
Antipyrine 234
Antipyrine, Abuse of 196
Antipyrine, Contraindictions an l Dangers of..... 359
Antipyrine, Craze in Paris..... 373
Antipyrine, Impure..... 99
Antipyrine Locally in Gonorrhœa..... 179
Antipyrine, Monopoly of 94
Antipyrine and Spirit of Nitrous Ether... 257
Antipyrine in Whooping Cough.....196, 238
Antisepsis by Means of Perchloride of Mercury..... 298
Antiseptic Paste 239
Antiseptic Treatment, Bergmann's Method of 117
Appointed Associate Professor 359
Arsenic, Eruption from external use of... 116
Artificial Fecundation 419
Ashby, T. A., M.D..... 261
Asthma, Treatment of 317
Astigmatism, Weak Cylinder Glasses for the Correction of Annoying..... 57
Atresia of the Vulva and Vagina..... 101
Aural Cases..... 512
Bacillus Lepræ 457
Bacillus Tuberculosis, Value of..... 198
Baker, Henry B., M.D., Notice of book by 232
Beam, William, M.D., and Leffman, Henry, M.D., Notice of book by..... 233
Beard, Geo. M., M.D., and Rockwell, A. D., M.D., Mention of book by..... 232

PAGE.

Beaumont, W. M., M.D..... 301
Belladonna Plaster, Pelculiar effects from a..... 110
Belt, E. Oliver, M.D..... 231
Benighted Orient..... 313
Bichloride of Mercury in the Treatment of External Diseases of the Eye..... 237
Bill, A Steep 36
Billings, John S., M.D.....407, 421
Birds, Origin of Diphtheria from..... 239
Bishop, S. S., M.D., Mention of book by.. 33
Bismuth, Salicylate of, in Dysentery among Children..... 14
Blindness, Prevention of, in Ophthalmia. 384
Blood in Diabetes..... 114
Boileau, Surgeon-Major..... 321
Bone Repair..... 267
Booker, W. D., M.D..... 288
Booker, William D., M.D., Notice of book by..... 434

BOOK REVIEWS.

Abdominal Surgery..... 391
Abdominal Surgery, A Year's Work in... 233
Accidents and Emergencies..... 191
Alimentation and Disease..... 190
Annual of the Universal Medical Sciences 190
Antipyrine 354, 434
Best Surgical Dressing..... 391
Chemistry, Manual of 433
Chemistry and Urinalysis..... 189
Clinical Morphologies, Partial Syllabic list of 233
Cocaine Dosage..... 393
Comparative Studies of Mammalian Blood 432
Disinfection and Disinfectants..... 493
Effects of Food Preservatives on the action of Diastase, Pancreatic Extract and Pepsin 233
Electricity, Practical Treatise on the Medical and Surgical Uses of..... 232
Electricity vs. Tait..... 433
Etiology of Fever..... 434
Excessive Venery.....433, 492
Experimental Contribution to Intestinal Surgery..... 434
Flexions, Intra-uterine Stem in Treatment of..... 233
Food Laws..... 233
Foot prints of a Profession..... 434
Gynæcic Disease, Neural and Psycho-Neural Factor in..... 233
Heart and Blood Vessels in the Young... 233
Index Catalogue of the Library of the Surgeon-General's Office, Vol. IX..... 493
Infectious Diseases 191
Intestinal Surgery, An Experimental Contribution to..... 233

PAGE

Language of Medicine..... 191
Laparotomies, One Hundred and Sixty-One..... 233
Laparotomy, Results of, for Acute Intestinal Obstruction..... 233
Larynx, Intubation of..... 190
Mammalian Blood, Comparative Studies of..... 354
Manual of Chemistry..... 492
Manual of General Pathology..... 493
Medical Directory for Baltimore, Washington, Maryland and District of Columbia 491
Menstruation, Disorders of..... 232
Modern Treatment of Diseases of the Liver.....433, 492
Modern Treatment of Pleurisy and Pneumonia..... 32
National Formulary of Unofficinal Preparations..... 434
Nervous System, Applied Anatomy of.... 191
New Way of Training Nurses..... 391
Nurses' Manual..... 192
Obstetrics, System of..... 233
Ovary, Papillomatous Cystic Tumor of... 232
Partial Syllabic List of Clinical Morphologies..... 433
Pharmacology, Therapeutics and Materia Medica, Text-book of..... 433
Physiological Argument in Obstetric Studies and Practice..... 233
Pleurisy and Pneumonia..... 191
Pneumonia, Causation and Prevention of 232
Pneumonia, and Pleurisy, Modern Treatment of..... 32
Ptomaines, and Leucomaines..... 277
Quiz Compend, No. 8..... 493
Rectal Insufflation of Hydrogen Gas..354, 433
Report of Yale Observatory for 1887-8... 393
Significance of Epiblastic Origin of the Central Nervous System..... 493
Skin, Diseases of..... 189
Skin Diseases, Photographic Illustrations of..... 233
Study of Some of the Bacteria found in the Dejecta of Infants Affected with Summer Diarrhœa..... 434
Text Book of Human Physiology..... 493
Text Book of Pharmacology, Therapeutics and Materia Medica..... 492
Theine..... 192
Theory and Practice of the Ophthalmoscope..... 493
Therapeutics, Its Principle and Practice.. 492
Transactions of the Medical Society of the State of Pennsylvania..... 493
Two Cases of Removal of Uterine Myoma 493
Union of Medical School and University. 392
Uranoplastik, &c..... 192
Urethra, Male..... 277
Urine, Examination of..... 189
Venereal and Skin Diseases, Atlas of..... 233
Venereal and Skin Diseases, Taylor's Clinical Atlas of..... 276
Women, Diseases of.....233, 277
Zimmer-Gymnastik..... 192

Brain and Spinal Cord, Surgery of....344, 362
Brandt, Ludwig, M.D., Notice of book by 192
Bright's Disease and the Ophthalmoscope 35
Brunton, T. Lauder, M.D., Notice of book by.....433, 492

PAGE.

Burns, Salve for..... 239
Burns and Scalds, Antiseptic Method of Treating..... 296
Cæsarean Section, Case of..... 164
Cairo, Sanitary Condition of..... 378
Calomel as a Diuretic..... 455
Campbell, F. R., M.D., Mention of book by.....33, 191
Cancer Contagious..... 133
Cancer, Contagiousness of..... 295
Cancer Uterine, Diagnosis and Treatment of..... 261
Cascara Sagrada in Rheumatism..... 155
Case of the Late German Emperor..... 155
Catarrh, Chronic Pharyngeal..... 475
Cataract Operation Without Iredectomy.. 299
Chancellor, C. W., M.D..... 334
Chancroid, Treatment of..... 238
Charcot and the Emperor of Brazil..... 259
Chestnut, J. H. W., M.D..... 243
Chew, S. C., M.D..... 281
Chian Turpentine in Cancer..... 276
Children's Teeth..... 278
Chisolm, Julian J., M.D..... 161
Chloroform, Committee on..... 18
Chloroform in Obstetrics..... 105
Chloroform, Macleod on..... 399
Cholera Infantum..... 356
Chorea, Habit, Some Cases of and Their Treatment..... 83
Chunn, Wm. Pawson, M.D..... 81

CLINICAL LECTURES.

Chew, S. C., M.D..... 281
Cordell, E. F., M.D..... 325
Michael, J. Edwin, M.D..... 245

Clinical Thermometry..... 321
Cocaine, Danger from use of..... 374
Codeia, Therapeutic uses of..... 234
Colchicine Poisoning..... 295
Colds..... 299
Colic, Violent, Treatment of..... 139
Collapsed Druggist..... 294
Combined Chloroform and Cocaine Anæsthesia..... 458
Compensation for the Loss of an Eye.... 297
Congress of American Physicians and Surgeons.....275, 376, 417
Congress on Tuberculosis..... 337
Connecticut Medical Society..... 133
Consultation, Novel reason for declining a..... 97
Constriction of the Penis by an Iron Ring 354
Consumption, Treatment of..... 97
Cordell, Eugene F., M.D.....291, 325
Cornea, Rabbit's Successfully Transplanted to Human Eye..... 161

CORRESPONDENCE.

Cornea, Transplantation of..... 214
Correction.....27, 288
Croup and Diphtheria..... 189
Edinburgh Letter..... 387
Gastro-Enteritis, Treatment of..... 13
Insanity, Small Hospitals for..... 335
London Letter.....212, 351
Medical Practice Act..... 334
Morphia Habit..... 93

PAGE.

Paris Letter....286, 287, 351
Pasteur Institute, Visit to.... 231
Publish Your Medical Observations, Reply 188
Reply to Review.... 388
Typhoid Fever, Etiology of.... 353

Catskill Mountains as a Health Resort.... 493
Clairborne, John Herbert, Mention of book by.... 493
Cocaine in Hydrophobia.... 496
Cough, Reflex from Pregnancy.... 109
Cracked Nipples.... 79
Creolin as an Internal Medicine.... 279
Creolin Internally.... 159
Creosote, Large Doses of, in Pulmonary Phthisis.... 157
Croton Oil, Large Dose of.... 359
Curtis, B. Farquhar, Notice of book by... 233
Cutter, E., M.D.... 388
Cutter, E., M.D., Notice of book by..233, 433
Cut Throat.... 221
Deafness, Treated by Pilocarpine.... 274
Decaisne on Smoker's Vertigo.... 55
Delivery, Management of, Prior to the Seventh Lunar Month.... 207
De-Schweinitz, G. E., M.D.... 83
Diabetes, Saccharine in.... 38
Diabetes, Blood in.... 114
Diagnosis of Diseases of the Stomach by Chemical Means.... 134
Diarrhœa and Dysentery, Enemata of Water in the Treatment of.... 277
Diarrhœa Fetid, Treatment of.... 159
Diarhœa, Micro-organisms of Summer.... 219
Diarrhœa, Treatment of.... 219
Diarrhœa, Treatment of Summer, by Antiseptics.... 277
Diarrhœa, Treatment of Chronic.... 236
Digitalis as a Diuretic and Laxative.... 259
Digitalis, Formula for Use of.... 37
Diphtheria, Etiology of.... 326
Diphtheria, Therapeutics of....123, 141
Diphtheria Pharyngeal, Antiseptic Treatment of.... 158
Diphtheria, Origin of, from Birds.... 239
Disinfectant, Good Domestic.... 18
Dislocation of the Shoulder, Rapid and Simple Method of Reducing.... 199
Distinction and a Difference.... 458
Distomum Hæmatobium, Virchow on.... 99
Doctor Goeth a Summering.... 289
Domville, Edward J., M.D., Notice of book by.... 192
Donaldson, F., M.D.... 481
Donders, Retirement of.... 159
Drowning, Death by.... 458
Drunkenness as a Disease.... 195
Dudley, E. C., M.D....341, 361
Dulles, Charles W., M.D., Notice of book by....33, 191
Dysentery, Galloway on.... 399
Dysmenorrhœa, Treatment of....78, 238
Dyspepsia Flatulent, Treatment of....19, 217
Ear Middle, Treatment of Acute and Chronic Inflammation of.... 23
Eczema.... 39
Electrical Treatment of Diseases of the Uterus.... 302
Erysipelas and Tuberculosis.... 498

PAGE.

Endometritis Purulent, Hot Intra-Uterine Douche in.... 130
Epididymitis, Paquelin Cautery in Acute. 235
Escherich.... 197
Extra-Uterine Pregnancy.... 457
Fatty Heart, Laxatives in the Treatment. 198
Fever, Etiology of.... 16
Fistula in Ano, Radical Cure of.... 36
Flint, Austin, mention of book by.... 497
Flooding.... 217
Fœtus in Utero, Some Considerations Regarding the Death of.... 63
Foreign Bodies in the Ear, Nose, &c.... 307
Formad, Henry F., M.D., Notice of book by.... 354, 432
Fox, George Henry, Notice of book by.... 233
Fox, L. Webster, M.D.... 214
Fox, L. W. and Geo. M. Gould, Mention of book by.... 493
French Doctor of 1650.... 439
Fromm, B., Notice of book by.... 192
Gall Stones, Treatment of.... 257
Galloway on Dysentery.... 399
Galvanic Current, New Method of Supplying for Medical Use.... 114
Garland, G. W., M.D., Mention of book by....32, 191
Gastric Catarrh in Children, Treatment of.... 197
Gastroliths.... 376
Gastrostomy.... 393
Gluten Bread.... 512
Gonorrhœa, Antipyrine Locally in.... 179
Gonorrhœa, Spinal Manifestation of.... 358
Gould, Geo. M., and L. W. Fox, Mention of book by.... 493
Gouty Peripheral Neuritis.... 214
Gowers, W. R., M.D., Mention of book of 32
Greeks and Roman, Physical Training of 37
Gynæcological Specialism and Woman's Place Therein.... 398
Gynæcology, Some New Methods of the Use of the Faradic Current in.... 77
Hæmorrhage from the Palm.... 417
Hæmorrhagic Pharyngitis.... 139
Hæmorrhage, Tar Water in.... 258
Hæmorrhage, Treatment of, by Revulsion over the Hepatic Region.... 438
Hair Washes.... 194
Hall, G. Stanley, M.D.... 397
Hartshorne, Henry, Mention of book by. 33
Headache, Prescription for.... 259
Heart Action, Irregular.... 218
Heart, Wounds of the.... 459
Heredity, Remarkable Case of.... 36
Hernia, Double Femoral on Same Side, Radical Cure.... 184
Hernia, Report of Three Cases of Operation for Strangulated.... 1
Hewitt, Grailey, M.D., Notice of book by.... 233
Higher Medical Education.... 216
Hip Disease, Adduction and Abduction in 157
Hirst, Barton Cook, M.D., Notice of book by.... 233
Hoagland Laboratory.... 495
Hoffman, Robert, M.D....132, 270
Howe, Joseph W., M.D., Notice of book by.... 433, 492

PAGE.

Hughes, C. H., M.D., Notice of book by.. 233
Hulbert, Geo. F., M.D., Notice of book by 33
Hurd, E. P., M.D., Notice of Translation by.....191, 433 492
Hyde, James Nevin, M.D., Notice of book by..... 189
Hydramnios of Pregnancy Mistaken for Ovarian Tumor..... 373
Hydrastis Canadensis..... 299
Hydrophobia, Cocaine in..... 496
Hypnotic, A New..... 39
Hypnotic, A New Sulphonal..... 38
Hypnotic for Use in Alcoholism..... 78
Hypnotism..... 15
Hysterectomy, Case of..... 381
Incompatibility of the Iodide and Chlorate of Potassium..... 288
Infant Mortality..... 350
Infants, Artificial Feeding of.....255, 318
Infertility of the Male..... 256
Influence of Bromide of Potassium on the Elimination of Urea..... 497
Inhalations, Value of, in the Treatment of Lung Diseases..... 477
Insane, Modern Treatment of the..... 312
Insect Stings..... 158
International Congress of Medical Jurisprudence..... 493
Intestines, New Means of Diagnosticating Penetrating Wounds of the..... 78
Intubation Tubes..... 147
Intussusception, Resection of Intestine for 357
Ipecac, Wine of, by Inhalation..... 159
Jackson, A. Reeves, M.D., Notice of book by..... 233
Jacobi, A., M.D.....123, 141
Jacobi, A., M.D., Notice of book by..... 233
Jacoby, George W., Mention of book by.. 493
Jaggard, W. W., M.D..... 164
Jenks, Edward W., M.D., Notice of book by..... 232
Johns Hopkins University..... 17
Johnston, Chistopher..... 184
Jones, Mary A. Dixon, Mention of book by..... 493
Kansas, Medical College in..... 113
Keen, W. W., M.D..... 381
Kephir, Use of, as an Infant Food..... 258
Keyes, E. L., M.D., Mention of book by. 32
Kidney, Relation of Diseases of, to Diseases of the Heart..... 34
King, A. F. A., M.D., Notice of book by.. 233
Knipp, H. E., M.D..... 448
Laidley, L. H., M.D., Notice of book by.. 232
Lanolin..... 238
Laparotomy for Gun Shot Wound..... 357
Laparotomy for Tubercular Peritonitis... 315
Larynx, Extirpation of..... 299
Leffmann, Henry, M.D., and Beam, William, M.D., Notice of book by..... 233
Leffmann, Henry, Notice of book by..... 233
Leprosy in Russia..... 259
Lewers, Arthur H. N., M.D., Notice of book by..... 277
Liability of Druggists for Clerks' Mistakes 237
Lipanin..... 477
Liver, Action of Spirituous Drinks on.... 192
Liver, Suture of Wounded..... 199
Lynch, John S., M.D., Death of.....454, 590
Macewen on Surgery of the Brain and Spinal Cord..... 356

PAGE.

Macewen, William, M.D.....344, 362
Macleod on Chloroform..... 399
Malarial Attacks, Hypodermic Injections in..... 259
Mammary Cancer in the Male..... 237
Mammary Glands, Elimination of Medicines by..... 78
Mamma, Sounding the Ducts of the..... 194
Man's Power of Imagination..... 379
Marshall, Benjamin, M.D., Notice of book by.....354, 434
Maryland Doctors, Their Public and Professional Services..... 461
Mattison, J. B., M.D., Notice of book by. 393
Mays, Thomas J., M.D., Notice of book by 192
Medical Aphorisms.....139, 298
Medical Badge..... 454
Medical Examining Board of Virginia.... 95
Medical Items....20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280, 300, 320, 340, 360, 380, 399, 420, 439, 460, 480, 500, 512.
Medical Law, in Maryland, Present Status of..... 75
Medical Museums.....407, 421
Medical Practice Act..... 437
Medical Societies..... 477
Medical Society of Virginia..... 478
Medical Student..... 435
Medicines, Time for the Administration of Certain..... 76
Mental Disease, Rare Form of..... 297
Mercury, Salicylate of, in Syphilis..... 36
Merriam, Horatio C., M.D., Notice of book by.....354, 434
Michael, J. Edwin, M.D..... 246
Migraine, Formula for..... 79
Milk in Summer, Preparation of..... 197
Miller, John S., M.D..... 267
Modern Cardiac Therapeutics..... 418
Morphia in Puerperal Eclampsia..... 236
Morrow, Prince A., M.D., Notice of book by..... 233
Moseley, Wm. E., M.D..... 130
Mother's Milk, Effect of Food Upon the Composition of..... 76
Mucous Patches..... 214
Munter, Professor..... 139
Myalgia, Muriate of Ammonia in..... 339
Myalgia, Remedy for..... 37
Naming the Baby..... 290
National Association of Railway Surgeons 237
Neale, L. E., M.D..... 27
Neuralgia..... 279
Neuralgia, Chloroform, and the Constant Current..... 511
New Drugs, Clinical Experience with.... 73
Newell, Otis K., M D., Notice of book by. 391
Nitroglycerine in Tinnitus Aurium..... 110
Noises and the Nerves..... 79
Nostrum, A Dangerous..... 116
Obesity, Influence of Water on..... 311

OBITUARY NOTICES.

Lynch, John S., M.D..... 479
West, George W., M.D..... 499

Obstetrics, Chloroform in..... 105
Obstetrics in America and in Germany... 96
O'Dyer, Joseph, M.D..... 147

PAGE.

Operating Without Permission..... 278
Ophthalmologists, Leading of Paris..... 138
Orchitis and Epididymitis..... 158
Otis, Fessenden N., M.D., Notice of book by..... 277
Otorrhœa and Phthisis, Relation Between 270
Ovariotomy, Report of a Case of..... 243

Painless Tooth Extraction..... 499
Paraldehyde, An Elixir of..... 14
Paraldehyde in Obstinate Vomiting..... 259
Paralysis Agitans, Pathogeny of..... 279
Parish, William H., M.D..... 207
Parkes, Louis, M.D..... 283
Pasteur's Honors..... 279
Payne, Joseph Frank, M.D., Mention of book by..... 493
Peebles, Thos. C., M.D..... 307
Perinæum, Saving of the..... 355
Peritonitis, Acute, Successfully treated with Saline Purgatives..... 218
Peritonitis Caused by Round Worms..... 499
Pertussis, Pathology and Treatment of... 137
Phenic Acid Treatment of Variola..... 137
Phthisis and Otorrhœa, Relation between 270
Phthisis, Pulmonary, Large Doses of Creosote in..... 157
Phthisis, Hot Air Inhalations in..... 496
Phthisis, Premonitory Symptoms of..... 99
Physician and his Charges..... 115
Physician as a Student of Nature..... 395
Physicians, Mortality Rate Among..... 78
Physiological Action of Iron..... 498
Pigmentations in Pregnancy..... 78
Pills, Unabsorbed..... 94
Pilocarpine, Deafness Treated by..... 276
Placenta, The Crédé Method of Treating the..... 253
Platt, W. B., M.D..... 13
Pleurisy, Compressed Air in..... 253
Pneumonia, Case of with Prolonged High Temperature..... 241
Poisoning, Bismuth..... 154
Poisoning by "Methylated Spirit"..... 448
Poisoning, Case of Chloroform..... 132
Poisonous Effect of Cigarette Smoking.... 417
Positive Medicine..... 224
Pregnancy, Hegar's Sign of, the True way to Obtain it, its Value in the Diagnosis of Pregnancy, in Cases of Placenta Prævia and in Cases of Suspected Abortion..... 43
Pregnancy, Pigmentation in..... 78
Pregnancy, Reflex Cough from..... 109
Pregnancy, Sane Only During..... 79
Presbyterian Eye, Ear and Throat Charity Hospital Report..... 285
Preston, George J., M.D.....212, 286
Presystolic Murmur, Diagnostic Significance of the Mitral..... 481
Primary Syphilis of the Tongue..... 410
Princely Physician..... 344
Professional Certificate Signers..... 497
Progress of Medical Education.....501, 510
Prostate, Malignant Tumors of..... 138
Pseudo-Ulcers of the Tongue..... 499
Publish Your Medical Observations..... 112
Puerperal Eclampsia, Morphia in..... 236
Pylorus, Digital Dilatation of the..... 256
Pyogenic Bacteria..... 459

Quackery vs. Regular Practice..... 393

PAGE.

Rabbit..... 178
Rabbit's Cornea, Transplantation of..... 113
Ramsey, Ambrose L., M.D., Notice of book by..... 191
Reassembling of Schools and Infectious Diseases..... 434
Recent Congress on Tuberculosis..... 416
Rectum, Foreign Bodies in the..... 294
Reforms in Medical Education..... 494
Relation between Diabetes Mellitus and Diseases of the Heart..... 193
Relation of Albuminuria to Life Insurance..... 436
Relation of Bacteria to Pneumonia..... 314
Relation of Social Life to Surgical Disease 401
Remarkable Fecundity..... 299
Resuscitation in Threatened Death from Chloroform..... 495
Rheumatism, Formulæ for..... 239
Rheumatism, Hyperexia Acute, Treated by Ice Pack..... 17
Ringworm, Treatment of..... 19
Risk of Travel..... 195
Rockwell, A. D. and Beard, Geo. M. Notice of book by..... 232
Rohé, George H. 21, 41, 61, 87, 121, 181, 201, 461.
Rolando, Henry, M.D., Death of..... 511
Ruptured Tubal Pregnancy..... 111

Saccharine..... 377
Saccharine in Diabetes..... 38
Saccharine Preventing Ammonical Change in Urine in Chronic Cystitis..... 195
Saccharine, Therapeutic Value of..... 295
Sajous, Charles, E. M.D., Notice of book by..... 190
Salisbury, J. H., Notice of book by..... 190
Sane only During Pregnancy..... 79
Scotch Oats Essence..... 73
Scrofulous Neck..... 257
Sea Sickness, Cause of..... 496
Sea Sickness, Death from..... 398
Seawater in London.....274, 311
Senn, N., M.D., Notice of book by 233, 354, 433, 434.
Sextuple..... 299
Sexual Appetite, Influence of Removal of Uterus and Appendages on..... 256
Shoemaker, George E., M.D..... 109
Shorthand and the Physician..... 476
Simon, W., M.D., Notice of book by 433, 492
Simple Prescriptions, Value of..... 456
Skin Grafting with Cock's Comb..... 178
Sleeping with the Head North..... 457
Snell, Simeon, M.D..... 384
Society Practice..... 119

SOCIETY REPORTS.

American Medical Association..... 47
Baltimore Medical Society, 185, 186, 249, 490
Clinical Society of Maryland, 3, 29, 151, 176 228.
Congress of American Physicians and Surgeons.....413, 430
Gynæcological and Obstetrical Society of Baltimore..... 89
Gynecological Society of Chicago..... 370
Medical and Chirurgical Faculty of Maryland..... 12

PAGE.

Obstetrical Society of Philadelphia....53, 448
Philadelphia Clinical Society..... 251
Philadelphia County Medical Society 7, 28, 71, 172, 211, 251, 272, 308, 329, 471.

Sodium, Salicylate of, Treatment of Tonsillitis by..... 33
Soldier, Physique and Diet of..... 198
Solis-Cohen, J., M.D.....441, 464
"Somebody's" Operation..... 314
South Carolina, Medical College of the State of..... 379
Spermatorrhœa, Treatment of with Electricity..... 218
Starch, Effect of Cooking upon..... 33
Starr, Walker and Powell, Mention of book by..... 33
Stomach, Effect of the Bitter Tonics on the Healthy and Diseased..... 74
Stricture, Various Modes of Treating.... 59
Sudden Death from Fever..... 296
Suicide with a Pin..... 297
Sulfanol..... 476
Sulphonal..... 239, 298
Sulphonal, A New Hypnotic..... 38
Surgery in the Last Half Century 396
Suspended Animation in the Infant at Birth..... 135
Sweating in Infectious Diseases..... 438
Syphilis, Advances in the Treatment of.. 58
Syphilis, Lectures on the Cutaneous Manifestations of....21, 41, 61, 87, 121, 181, 201
Syphilis, Miller on..... 379
Syphilis of the Larynx, Trachea and Bronchi 441, 465
Syphilides of the Vulva..... 39
Syphilis, Salicylate of Mecury in..... 36

Taneyhill, G. Lane, M.D..... 101
Tanner, T. H., M.D., Mention of book by 32
Tannin for Burns of the First Degree.... 253
Tape Worms..... 219
Tape Worm, Convenient Formula for the Treatment of..... 259
Tar Water in Hæmorrhage..... 258
Tea and the Teeth..... 377
Teaching Students to Think..... 118
Thumbless Hand, Operation to Increase the Usefulness of..... 511
Thermometer, Hints on the Use of..... 365
Thomas Wilson Sanitarium, Original Work at..... 215
Thyroid, Galvanization of, in Epilepsy... 79
Tinnitus Aurium, Nitroglycerine in..... 110
Tit for Tat..... 312
Tonsillitis..... 39
Tonsillitis, Acute Follicular, Benzoate of Sodium in..... 39
Tonsillitis, Acute, Treatment of in Children..... 154
Tonsillitis, Treatment of, by Salicylate of Sodium 33
To Limit Marriage..... 498
Too Many Doctors in London..... 379
Tornadoes, Prize Studies in..... 179
Tracheotomy, Cocaine in..... 318
Tracheotomy, Improvement in..... 193
Treatment of Diseases by Mineral Water. 455
Treatment of Wounds by Constant Irrigation..... 254

PAGE.

Tuberculosis from Milk..... 283
Tumor of the Right Ovary in a Child of Seven..... 357
Tumor of the Spinal Cord..... 316
Tumors, Abdominal, in the Negro Race.. 81
Tumors, Malignant of the Prostate..... 138
Turkish Bath..... 436
Tympanites, Dangers of Intestinal Puncture in the Treatment of..... 296
Typhoid Bacilli, Action of Boiling Water on..... 196
Typhoid Fever as Affected by the Public Water Supply of Vienna..... 19
Typhoid Fever, Treatment of..... 437
Typhoid Fever, Treatment of by Carbolic Acid..... 319
Tyson, James, Mention of book by....32, 189

Uhler, J. R., M.D..... 224
Ulcers of the Stomach, Origin of Simple. 278
Ulcers, Treatment of Chronic..... 223
Umbilical Cord, Treatment of..... 258
Urticaria Diffusa after Ovariotomy, Tait on 398
Uterine Cancer, Modern Treatment of.... 398
Uterine Myomata, Treatment of by Apostoli's Method..... 378
Uterus, Lining Membrane of, Tolerance of Bacteria by..... 158

Vaccination Against Cholera..... 396
Vaccination in the Harem..... 297
Vaccination, Value of..... 319
Vaginitis..... 39
Valvular Lesions, Small and Moderate... 355
Van Bibber, John, M.D..... 335
Varicocele in the Female..... 418
Variola, Phenic Acid, Treatment of..... 137
Vaughan, Victor, C., M.D..... 277
Vertigo, Smoker's, Decaisne on..... 55
Vigier's Coryza Powder..... 359
Vulva, Syphilides of..... 39

Warren, Dr. Edward, on Charcot..... 293
Water Supply of Summer Resorts..... 459
Waxham, F. E., M.D., Notice of book by 190
Welch, William H., M.D., Notice of book by..... 392
Wells, Sir T. Spencer 302
What a Doctor Should Carry with Him.... 116
What Medical Men Said of Anæsthetics Forty Years Ago..... 358
Where There are Three Doctors There are Two Atheists 395
Whooping Cough, Antipyrine in.....196, 238
Whooping Cough, Treatment of..... 157
Williams, P. C., M.D..... 105
Wilson, H. P. C., M.D.....351, 387
Winsey, Whitfield, M.D.....189, 241
Winslow, Randolph, M.D..... 221
Wonderful Cases..... 95
Wood, H. C., M.D., Notice of book by.433, 492
Woods, Hiram, M.D..... 285
Woody, Sam E., M.D., Notice of book by 189
Worcester, A., M.D., Notice of book by.. 391
Wylie, W. Gill, M.D., Notice of book by. 233
Wyman, Hal. C., M.D., Notice of book by 391
Yale Medical Society..... 171
Yellow Fever, Dr. Sternberg on..... 15
Yellow Fever, Precautions Against..... 338

Original Articles.

A REPORT OF THREE CASES OF OPERATION FOR STRANGULATED HERNIA.*

BY JOSEPH PRICE, M.D.,
OF PHILADELPHIA.

Case I.—Miss B., white, aged forty, single, a patient of Dr. Dundore, had had a reducible inguinal hernia of long standing and had never worn a truss. In May, 1887, it became irreducible, and the bowels were completely occluded for three days. Well-directed efforts to reduce failing, Dr. Dundore decided upon operative interference, and invited me to see her. The usual symptoms of a strangulated hernia were present, the abdomen being greatly distended and tympanitic.

Upon incision the bowel was found to be firmly adherent to the sac, requiring considerable dissection to free it completely. After severing the stricture, the bowel was pulled out for a few inches and found to be completely occluded by bands of inflammatory tissue due to limited peritonitis at the point of stricture—the neck of the sac. These bands were broken up by fingers, forceps, and scissors, which restored the calibre of the bowel and it immediately collapsed. The bowel was very dark in color until released from these inflammatory bands, when its color changed rapidly, and I decided the circulation sufficiently good to restore it to the abdomen. The canal was closed by buried silk-worm gut sutures; the incision with silk. Dry dressing; recovery.

Case II.—Miss K., white, aged seventy-five years, never pregnant, a patient of Dr. F. X. Dercum, who called me in consultation March 1, 1888. Found the patient in bed and very feeble, with a history of complete occlusion of the bowel for twelve days, and stercoraceous vomiting for eight days. The abdomen was much distended and tympanitic. There was a tumor the size of a hen's egg over the right femoral ring which presented no fluctuation nor other symptoms of local trouble. There was also a tumor over the left femoral ring the size of a goose egg, likewise presenting no symptoms of local trouble. The patient said the tumor on the left side had existed for eighteen years, while that on the right side was more recent, but also of several years standing. Taxis failing to accomplish any results, operation was suggested as the last resort, and was performed the next day at the patient's request. As there were no symptoms specializing either ring as the site of the obstruction, and as the distention was so great that occlusion at some other point was feared, the incision was made in the median line. Examination now revealed that the tumor on the left side was not a hernia, but either a hydrocele of the canal of Nuck, or an old hernial sac that had become cystic. The gut was incarcerated at the right femoral ring, and very firmly adherent. Fearful of tearing the intestine I made another incision over the tumor, and was compelled to dissect the intestine from its sac. The intestine was then drawn through the median incision and carefully examined. It was found to be greatly congested but speedily cleared, and was returned to the abdomen. The neck of the sac was twisted upon itself, and transfixed by deep buried sutures of silk, and stitched to the edges of the ring, the canal being closed by deep silk sutures. The median incision was closed with silk sutures. Dry dressings. The bowels moved spontaneously the same evening, and the patient recovered without a bad symptom. Stitches were removed the tenth day.

Case III. *Operation for ventral hernia.*—(By Dr. Joseph Hoffman.) Mrs. M., aged fifty-eight, married at nineteen years, ten children, four miscarriages. She first noticed the rupture about fourteen years ago, when it was the size of a thimble. She in no way attributes the origin of the rupture to child-bearing, which, since she is a large heavy woman weighing about one hundred aud ninety pounds, and having a great pendulous belly, would at first suggest the probable cause. The cause to which she attributes

*Read before the Philadelphia County Medical Society, April 11, 1888.

the hernia is a rather singular accident. Being, as has just before been stated, a large woman and her belly pendulous, when lying on her side, the abdominal walls lax and flaccid lie loosely on the bed. One night while in this position, at the side of her husband, he turned in his sleep, and in so doing put his elbow directly upon her belly, forcing, as seems probable from her story, the two recti muscles apart. At any rate from this time on she suffered discomfort, a burning sensation, and finally the hernia appeared. Her husband being a cripple and a fruit dealer, she was accustomed to help him by carrying his baskets from the markets, by this means her trouble grew worse. Two or three years after its first appearance she was suddenly taken ill, her bowels refusing to move. Finally, after taking forty cents worth of castor oil, a movement was secured with great suffering. After this she had a second violent attack in about a year, and from this time on she has had attacks at intervals of about four months, till the time at which Dr. Price and myself operated on her, the last of August. During this period she was seen by six or eight physicians, most of all whom described her trouble as a "twisting of the guts," but operation was never suggested. Cathartics were administered to her each time she was attacked, no physician seeming to recognize the fact of their danger, one excepted, who also finally ordered them. At her first attack it has been omitted to state, that she was given up to die. In all she had ten or twelve serious attacks. At her last seizure in August, 1887, after efforts to secure two other physicians she came for me. I found the woman in extreme pain, she had not vomited. Examination was made and the hernia discovered above the umbilicus, about the size of a pint tin-cup or larger, very tympanitic and hard. Application of hot poultices was ordered, and a hypodermic of one-half a grain of morphia given. The next morning she was much relieved, the tumor smaller, and altogether she was very comfortable, so much so, indeed, that I omitted my visit the day after. The next, the fourth day, I again visited her, and to my dismay found her vomiting stercora. This was all the more astonishing because I had not been informed of any change for the worse. I at once administered a second hypodermic of morphia, and went for the assistance of Dr. Joseph Price. After some delay I found him, and we operated at once. An incision was made about six inches long over the hernia. The integument was very thin, and extreme care was necessary to avoid cutting through the intestine. On getting through into the peritoneum, we found it so much thickened that it was at first impossible to distinguish between it and the gut. It was finally differentiated and carefully dissected free from the gut, to which it was closely adherent. The guts, too, in the sac were closely adherent, and separated with difficulty. The sac was tied off and removed. The distention of the bowel disappeared at once on its being freed. The strangulating portion of the sac was so firm as to resist all efforts to stretch it, and only by the utmost care was the bowel released, grasped as it was as if in a vise. About ten inches of the large intestine were found in the sac. This portion was very dark, but not gangrenous. After its release, the gut was carefully washed and returned. The incision was closed by deep and superficial sutures, all of silk. The catgut we happened to have was too slight to withstand the great strain put upon it by the enormous belly walls. Indeed, the silk was little better, for having been so long in antiseptic solution it had become rotten, and was thoroughly untrustworthy. I was unfortunate, too, in the breaking of the curved needles, which having been made for the Hagedorn holder were not fitted for an ordinary instrument. The operation was however completed. The woman made a rapid recovery, and in three weeks was up, and stated herself more comfortable than she had been for fourteen years.

The incision did not suppurate worth the name, and closed promptly, though not smoothly.

Examination to-day finds the patient entirely comfortable, though the recti

have again separated. She wears both a band of rubber adhesive plaster, and a muslin bandage. Is entirely well. Her belly bandage is fifty and one-half inches in circumference.

Society Reports.

THE CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD MARCH 16, 1888.

The 207th meeting was called to order by the President Dr. N. G. Keirle M.D., in the chair.

Dr. Geo. J. Preston read a paper on

ATAXIC LATERAL SCLEROSIS, AND EXHIBITED THE PATIENT.

Dr. F. T. Miles said that he had seen several cases of this disease in the last two or three years. In one there was the spasmodic condition present with pain, etc., but the generative functions remained intact for a long time. In another case there was great weakness of the lower extremities, but very little spasm there; though the latter symptom was decidedly marked in the abdominal muscles.

Dr. G. J. Preston, in reply to a question from Dr. Branham, said that any voluntary movement on the part of the patient he had shown produced spasm, but no decided tremor could be detected.

Dr. H. Clinton McSherry read the next paper reporting

UNUSUAL SYMPTOMS FOLLOWING THE LOCAL USE OF COCAINE.*

Dr. R. H. Thomas reported several additional cases on the same subject.

Dr. N. G. Keirle in discussing the subject spoke of organic shock. He said that such symptoms had been observed by gynecologists after applications had been made to the uterus. Manipulation about the throat will sometimes bring on peculiar symptoms, irrespective of what is being used. He related a case in whose throat an application was made, and it brought out such serious symptoms that he feared the trachea would have to be opened before relief could be given.

Dr. Herbert Harlan said that he agreed with Dr. Keirle in his reasoning regarding the effect that manipulation will have on certain locations in the body, but he had never seen any bad symptoms coming on after the use of cocaine locally to parts outside of the throat. Every day it is used in eye practice. A five per cent. solution is dropped into the eye five or six times at short intervals, and no bad symptoms had he ever observed from its use. Subcutaneous injections of 10 to 15 ♏ of a solution of the same strength have been used for the purpose of removing small tumors and it has always acted well. There must be some peculiarity about its action when applied to the nasal mucous membrane.

Dr. Samuel Theobald said that he uses cocaine every day in his eye practice. Some of it must get into the nasal duct, but he could not recall a single instance of its bad effect. He had used it in his own family for allaying the pain of toothache where some of it must have been absorbed; no bad symptoms ever followed. He thinks that some of the fluid might have gotten into the larynx while being applied, and that probably was the cause of some of the symptoms described by Drs. McSherry and Thomas.

Dr. F. T. Miles said that the symptoms described may have been due to something in the operative procedure. He had used it frequently with children and also in cases of irritability of the larynx, and had never had the slightest bad results.

Dr. I. E. Atkinson thought that in the vast majority of cases cocaine can be used with entire safety; but a sufficient number are now on record to show that in some an idiosyncracy exists, and that bad symptoms follow its use. In some few instances death is even the result.

*See Maryland Medical Journal, March 24th, 1888.

Apart from these considerations there is a specific action belonging to the drug which must be remembered.

Dr. W. H. Norris said he had used cocaine in many cases of earache, toothache, etc., and had never seen any ill effects from it. He believed in the idiosyncracy that some possess to the effect of this drug as well as to other agents. Sometimes the preparation we use may be impure, and this be the cause of the bad symptoms, if any. He had used it in one case of irritable urethra in a female with the most happy results.

Dr. Hiram Woods spoke of a case he had seen at the Presbyterian Eye and Ear Hospital. The patient was a boy aged 9 years, who had a foreign body in his eye. For the purpose of removing it a few drops of cocaine were instilled, and patient was told to sit on a bench till it had its effect. No sooner had he seated himself when it was noticed he had fainted. Water was thrown in his face and he soon came to, but fainted again. After recovering this time cocaine was again distilled, and the body was removed without any other symptoms following. He did not believe this effect was caused by the action of cocaine.

Dr. Saml. T. Earle called attention to the cases he had published where serious symptoms came from the local use of cocaine in operations performed about the rectum.

Dr. William Rickert related a case of glossitis where he had used a four per cent. solution of cocaine, and it produced serious symptoms. He was suddenly called to the patient and found him moribund. Restoratives were given and he got better. The cocaine was continued again and the symptoms returned. He then stopped its use, gave stimulants and the patient did well afterwards. In another case of conjunctivitis cocaine did badly and produced unpleasant symptoms. He used morphia and atropia instead, and all went well.

Dr. Richard Thomas said cocaine was beneficial in the majority of cases, but we should always be on our guard. In regard to one of his cases, where bad symptoms came on, he had made applications with nitrate of silver and also with weak solutions of cocaine, with no bad effects. It was only when stronger solutions were used that the unpleasant effects were noticed. In the case reported by Dr. McSherry pledgets of cotton saturated with the solution were put into the nostrils. He had used other remedies in the same location without producing any bad symptoms, therefore he thinks that this disproves the theory of this special location having anything to do with the effect produced by cocaine.

Dr. H. C. McSherry said that unless he had found that the majority of the members present were of a different opinion from himself regarding the action of cocaine, he would never had been led to write this paper. Very few believe in the bad effects of the drug, and for that reason attention should be directed to it. He did not intend in his paper to go into a general discussion of the effects of cocaine, but simply wanted to point out certain symptoms that may arise when it is appled to the throat. It seems to be impossible that a few drops getting into the larynx could produce such symptoms as those observed in his cases. We should always be careful, though, in our manipulation when applying it.

Dr. L. McLane Tiffany related

CASES OF LAPAROTOMY FOR DISEASES OF THE LIVER.

Case I, was an hepatic abscess. Patient was a white male, æt. 24 years. In October, 1884, he was taken with an attack of dysentery which reduced him very much in his general health, but in February, 1885, he had improved and was up and about. In March of the same year he went south. While there dysentery again attacked him and he returned home in April. In July he went to Deer Park and got better. He went to Newport in August and became worse and his bowels continued irregular during that winter. In the spring of 1886 his bowels were still irregular and his physician stated that he had congestion of the liver. During the

summer of 1886 the patient had a capricious appetite, lassitude, irregular bowels and perhaps a chill or so (but this latter uncertain) were noticed. Amelioration in his condition did not occur during the Fall. He saw the patient January 20, 1887. Examination of all of his organs gave negative results. He was kept under observation and the changes noted during three weeks. In February a diagnosis of liver abscess was made. On March 9th he was tapped, but the contents soon reformed. An operation was then decided on and was performed March 19th, 1888. The patient was etherized and an incision made over the region of the liver below the ribs. Evidence of the abscess being situated in the superior portion of the organ it was decided to get free drainage from below. The parietal layer of the peritoneum being cut through and the liver reached, it was decided to close off all contact with the peritoneal cavity by stitching this layer firmly to the visceral layer of the liver, which was done with a glover's stitch. The incision was then carried through the liver and the abscess reached. During the incision a good deal of hemorrhage took place, but it was easily controlled by packing some lint into the wound. After it ceased, a drainage tube was inserted and the abscess cavity thoroughly drained. The wound was then united and dressed with iodoform gauze, etc. Early in April bile began to flow through the wound and so profusely did it do so that it became necessary to withdraw the drainage tube. In the meantime the patient was given ox gall internally. All symptoms soon subsided and he went on and made a perfect recovery.

Case II, biliary calculi. This patient was seen in consultation with Dr. Wilkins. A female, æt. 30 years, married and the mother of several children. Previous health good. Since August 1st, 1887, she has had frequent attacks of pain which presented the clinical history of biliary calculi. The paroxysms of pain would recur at intervals of one to two weeks, of variable duration and usually sudden in their onset and disappearance. Jaundice always followed the attacks of pain. The urine showed the presence of bile and the feces were clay colored. Vomiting usually followed the attacks and throughout dyspeptic symptoms predominated. Palpation and percussion showed pain and tumefaction in the right hypochondriac region. Gall stones were found from time to time in the feces. After exhausting all of the usual means of treatment operative aid was proposed and accepted by the patient. On the day of the operation the patient was emaciated, skin and conjunctiva considerably icteric. Pulse 96, temperature 99.6.° In the right hypochondriac region a tumor could be felt which was painful to the touch, movable and it would change its position toward the median line when the patient was placed on the left side. The operation was performed January 17th, 1888, under strict antiseptic precautions. The patient was etherized and an incision was made over the seat of the tumor. The liver was reached and the hand was introduced through the wound. Examination of the surrounding parts showed the gall bladder to be adherent to the intestines, which interfered considerably with its manipulation. Such being the condition it was decided to cut through the liver and reach the gall bladder that way. The parietal layer of peritoneum was firmly stitched to the visceral layer of the liver as was done in the case of liver abscess, thus closing completely the peritoneal cavity. An aspirator needle was then inserted through the liver substance towards the gall bladder and a small amount of viscid fluid was seen to come away. A knife was then introduced along the side of the needle and the gall bladder was found and opened. Quite a gush of hemorrhage took place which was controlled by thrusting the finger into the wound. Fifteen gall stones varying in size were removed. A drainage tube was introduced, the wound brought together and dressed with iodoform gauze. The patient soon recovered from the anæsthesia; one grain of opium was given every three hours and from this time all went well towards recovery.

January 21st the drainage tube was removed and on January 22nd the operations showed the presence of bile. Jaundice at this time was disappearing and by January 31st it was almost entirely gone. February 2d the sutures were removed and perfect union had taken place except a small fistulous opening. February 24th, the patient had gained in flesh and strength, all symptoms have subsided and she is gradually resuming her household duties.

DISCUSSION.

Dr. H. Rolando said that he had seen three cases of gall-stone that had been operated on and all were followed by death. One case in particular the operation was done, but it failed. An examination of the parts afterwards showed the gall bladder to be adherent to the pancreas. He thinks if such had been the case in Dr. Tiffany's patient his method of operating would not have been so successful.

Dr. Wm. Rickert said the paper read by Dr. Tiffany was one of the most interesting and important that had been read before the Society this season. It taught an important lesson of what could be done and it afforded a good example for the young surgeons to follow. He hoped that they all might be able to accomplish such results.

Dr. George J. Preston said that he had seen one case of supposed gall-stones some years ago that was under the care of Dr. W. W. Keene. The case was diagnosticated as one of gall-stones with a history of having had them for two years. Dr. Keene cut down on the gall bladder, but no stones were found. Some adhesions had taken place. He soon had to cease operating on account of the condition of the patient. Recovery took place, however, and there was no return of the trouble.

Dr. W. H. Norris said the paper of Dr. Tiffany was a very interesting one to him. It showed the results that could be gotten when one was capable and experienced in such work. He condemned the promiscuous way in which capital operation were being done these days by those who are incompetent to perform them. He had once a case similar to the one reported by Dr. Tiffany where the patient had suffered for 18 months from very severe symptoms. The late Prof. Smith was called to see her and he gave but little comfort about her condition. He said it was cancer. She became very much jaundiced Another physician was called and he decided that it was not cancer and ordered to be given dilute nitric acid in 12 drop doses. She went into the country for awhile; the same treatment was continued when she returned and to-day she is well and hearty.

Dr. Herbert Harlan said that he had seen a liver in the dissecting room in which he thought there had been an abscess. The right lobe was adherent to the viscera; the left one was hypertrophied and the lower half of it was consolidated. There was no evidence of inflammation. He concluded there must have been an abscess and that cicatricial tissue had replaced it. He did not know of what the patient died.

Dr. Randolph Winslow said that all of the cases of liver abscesses he had seen occurred in Germans. One died without operation. the other was operated on, got well, but died six months subsequently from dysentery. The aspirator is invaluable as an aid to diagnosis but of no use as a remediator. He looked up the literature of liver abscess some years ago and found that in cases where over 50 ounces of pus were drawn off they never got well from aspiration. Operation afterwards was necessary to bring about cure.

Dr. I. E. Atkinson called attention to the case of liver abscess aspirated some years ago by the late Dr. Richard McSherry where over 90 ounces of pus was drawn off and the patient made a perfect recovery.

Dr. L. McLane Tiffany in reply to a question said as regards the diagnosis of the presence of gall-stones he did not see how it could be made with certainty without opening the bladder. He agreed with Dr. Winslow about the aspirator. It is useful in making a diagnosis of abscess, but al-

most invariably its use is followed by operation. The nationality of liver abscess is somewhat of a conundrum and is in no way satisfactorily explained.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING HELD APRIL 11, 1888.

The President, J. Solis-Cohen, M.D., in the chair.

Dr. Joseph Price read a paper on

A REPORT OF THREE CASES OF OPERATION FOR STRANGULATED HERNIA.*

DISCUSSION.

Dr. John H. Packard: The amount of material presented for discussion in the papers read is so large that it would be difficult to do it justice.

In connection with the cases of hernia reported, he briefly mentioned another, in which an old femoral hernia was subjected to unjust suspicion. The patient, a woman, about fifty years of age, was brought to St. Joseph's Hospital with intestinal obstruction of four days' standing; her general condition was bad, and she had fecal vomiting. She had an old left femoral hernia, which had given trouble on several occasions, but had always been successfully reduced. This was cut down upon, and the sac found to be empty. Laparotomy was at once performed, a twist of the small intestine being found and relieved, flatus was discharged per anum, and the intense congestion and distention of the bowel relieved so that the mass was easily returned. In spite of vigorous stimulation hypodermatically and by the mouth, the patient sank, and died in about six hours. In this case, which will be elsewhere reported more in detail, an earlier operation would probably have had a different result.

As illustrating the difficulties attending the diagnosis of abdominal tumors, a case may be mentioned which occurred at the Episcopal Hospital some years ago. A man was sent down from the medical to the surgical ward to be operated on for an apparently movable tumor situated on the left side of the belly two inches below the level of the umbilicus. It was found, however, that the mass was firmly adherent to the parietes, and the operation was abandoned. The man died a few months later, and an autopsy showed that the disease was epithelioma of the pylorus, which had in some way become displaced and fastened by peritoneal adhesions in its abnormal relation.

The seat of pain is very deceptive as an index of the actual lesions in these cases. A woman who was brought to the Pennsylvania Hospital in 1886 on account of a gunshot wound, complained of pain in the right iliac region only, yet the ball had ranged upward from the left loin to near the right axilla, wounding the pleura, colon, stomach, liver, right internal mammary artery, and right breast.

Dr. Wm. Goodell: Some two years ago I operated, performing a double ovariotomy. The cysts were colloid, and there was no indication of malignancy. About a year afterward, the patient then being apparently well, she fell in getting out of a carriage. There was was pain in her right side, considered by her attending physician in the country to be an attack of peritonitis. The pain afterward shifted to the left hip, growing worse and worse. She was brought to me again and I examined her with the utmost care, feeling sure from the symptoms and from the emaciation that had occurred, that there was malignant disease. I thought that perhaps the stump of the ovary had taken on malignant degeneration.

Finding nothing, I called in a distinguished specialist, who twice examined her under ether, but failed also to detect a cause for the pain. The actual cautery was applied along the course of the sciatic nerve, to which region the pain was referred. Death took place in a few weeks, and at the autopsy, which was requested by the lady before her death, disseminated metastatic cancer of

*See page 1.

the liver was found. Clearly the ovarian disease had been malignant in the beginning, and was the focus from which sprang the hepatic disease. But the salient point here is pain apparently in the sciatic nerve, while the site of disease was the liver.

A few words as to Dr. Barton's case of ruptured cyst. The patient died probably from acute septicæmia. I have seen so many cases of burst cyst recover, that I have ceased to regard the accident as dangerous unless the general health has deteriorated from chronic absorption of septic material. Of course, this may occur. My last case failed to rally, and died on the seventh day from sheer exhaustion. The rupture had occurred some weeks before from a fall, and the vital powers were slowly impaired, as if by chronic poisoning. Here every abdominal organ was infected and she was greatly emaciated, and also bedridden.

On the other hand, I was surprised today by a visit from a patient upon whom I operated not quite two years ago. She had been tapped by a prominent physician in New York, who was unable to remove the fluid because it was colloid. A few weeks later I saw her. She was then very weak and emaciated and confined to her room. At the operation it was discovered that the cyst had ruptured and that every organ was either affected or infected with colloid. Even the skin and the abdominal wall were infiltrated with it where the trocar had entered. I thought she would recover from the operation, but expected death in a few weeks from progressive colloid infection. She was in blooming health when she called on me to-day, and had gained forty pounds.

With regard to the prognosis in these cases of burst colloid cysts, I hardly know what to say. I have seen cases remain well as long as three or four years and then the disease returned in some other organ. On the other hand, I have had a fatal return in a few months' time. When we open an abdomen and find the whole peritoneum roughened with milliary prominences or with papillary excrescences, are we dealing with a benign or with a malign disease? This is the important question, for on its hinges the prognosis; yet I am unable to answer it.

The apparent improvement after exploratory laparotomy referred to this evening, especially in bleeding fibroids, I have met with several cases, and it is mentioned by others. I cannot explain it. Possibly the irritation from the operation causes uterine contraction, or sets up some change in the circulation.

I think that Dr. Barton removes his stitches too soon. I used to remove them in five or six days. But some years ago a wound, after ovariotomy, reopened and there was considerable oozing of serum. The patient recovered, however. I then allowed the stitches to remain seven full days. In a case of laparotomy in which I had removed the stitches on the eighth day, the patient was doing well, got some hot tea into her windpipe on the tenth day, and in the paroxysm of coughing the wound reopened. I had much difficulty in returning the distended bowels, and she died in two or three days apparently from shock and not inflammation. Two or three months ago I opened an abdomen to remove the ovaries for a fibroid, under a distinct promise not to touch the tumor. I could not get at the ovaries they were so imbedded in the tumor, and I accordingly closed the wound. On the ninth day the stitches were removed. A few days later, through some imprudence of the patient, the wound burst open to the whole of its length. My son closed it, and the woman barely escaped with her life. In such cases I shall in future leave the stitches in for at least two weeks.

A word as to the of ether: I had nineteen cases of oöphorectomy last year, with one death. In that case the operation was very easy, yet suppression of urine followed and the patient died from uræmia, which I attributed to ether. As symptoms of kidney disease were not manifest before the operation, I omitted to examine the urine. Yet serious renal lesions must have existed, and I cannot but think that her life would have been saved had chloroform been used as the anæsthetic.

I was interested in Dr. Keen's paper,

for the case was my first one of oöphorectomy and the operation was performed *per vaginam*. The operation was not difficult, although the vigina was small. There were marked nervous symptoms after the operation, but no inflammation. The lady had been a patient of Dr. Weir Mitchell for rest cure. She had excessive abdominal pains, profuse menorrhagia and metrorrhagia. Dr. Mitchell recognized a fibroid tumor and requested me to see the patient. The tumor was as large as an infant's head, and we decided to remove the ovaries. This was done on October 4th. On November 20th the patient had been so much benefited that she walked two miles to church. She was in such a state of ecstasy over this, that her mother feared she would lose her mind. After that ill-defined pains returned and there was some bleeding from the vagina. On December 17th. I removed a painful neuroma of the cicatrix. The tumor was then reduced in size one-half. In March, 1878, the tumor had become so small that it gave inconvenience by coming down in the pelvis, bringing the womb with it, and I had to insert a pessary. On July 31st, of the same year, I found the tumor nearly as large as a horse-chestnut and springing from the right side of the anteflexed womb. In December she complained of occlusion of the bowel and bleeding at stool, which I attributed to piles. In 1880 there was more or less pain in the left hypochrondrium, with more or less nervous phenomena. April, 1882, there had been two slight menstrual flows, with the usual molimina. Later on violent and repeated hemorrhages from the bowel occurred, which were attributed by the patient to vicarious menstruation. For these hemorrhages I removed, in February, 1884, a large mass of piles by ligation, and also stretched the sphincter ani for a fissure. Since then I have not seen the patient.

It is interesting to note the rapid diminution of the large tumor. From the size of an infant's head it was reduced to that of a horse-chestnut. Neurosis was one of the marked features in this case. The patient is excitable, nervous, and of rare intelligence. When I recall the relief after the first operation, her extravagant delight at walking two miles to church, and the fears for her reason, I must confess that I look for a return of the pain once more, for I cannot see the relation between a uterine tumor and a pain complained of high up in the left hypochondrium. The patient was also highly susceptible to certain drugs, and the only anodyne I could employ was cannabis indica in small doses.

Dr. M. Price: In many cases it will be found that the cause of strangulation of the bowel is adhesion of the small intestine and bands of inflammatory lymph. The pressure and irritation set up slight peritonitis, and finally adhesions. An early exploration will save life. Handling of the bowel and tearing of the adhesions, or snipping them with scissors, will do no harm. Sometimes we cannot distinguish a mass of matted intestines from a tumor, as in the case of a little colored girl I opened the other day. By the time we had separated the adhesions and liberated the intestines there was no tumor. I think that in many cases, a fatal result may be attributed to the opium treatment. If any one will employ Epsom salt immediately after the patient comes out from the ether, where he now uses opium, he will never regret it. He will regret the use of opium.

As to removing stitches, if we use silkworm gut we need not give ourselves any concern. They may be left indefinitely if we choose. They will bear a strain of fifty or sixty pounds, and give no inconvenience of any kind.

Dr. John B. Roberts: The case of Dr. White renders it appropriate to refer at this time to the historic case of Dr. Levis, known as the "ethyl bromide death," which led to the abandonment of that anæsthetic in this city. The patient was placed under the anæsthetic for lateral lithotomy, for there were but three or four of us at that time in favor of the suprapubic operation. The skin was incised, but before anything more could be done the patient died. A larger, irregular stone,

but smaller than this exhibited by Dr. White, was found wedged into the neck of the bladder. The kidney was not markedly diseased, as in Dr. White's case, but there was organic disease of it and of other organs. That death was as independent of operation, and may have been as independent of anæsthetic as was that of Dr. White's patient. I think Dr. White is truly to be congratulated that he had not fixed the the day of operation twenty-four hours earlier.

There is another point of interest in both these cases. Such stones can be much better removed by suprapubic operation than any of the perineal operations.

Dr. H. A. Kelly: I had a case of referred pain due to the presence of fibroid tumors similar to that reported by Dr. Keen. There was much emaciation, constant cough, and a pulse of 120. She coughed whenever I touched the tumor. I performed hysterectomy, removing with great difficulty a mass of tumors, amidst which it was impossible to distinguish the uterus. The stump could not be brought up, and was treated intraperitoneally. Cough has stopped, weight increased twenty pounds, pain is gone, and the patient is in the best of health and spirits.

The indications for the treatment of the various kinds and conditions of hernia are so different that it is difficult to discuss them together.

In one case, which I watched for a number of years through many attacks, I finally made an autopsy. The patient was very fat, and the intestines protruded in a large mass,which could never have been returned to the abdomen, which had so long been accustomed to their absence. The only operation possible would have been splitting the ring to relieve the tension. In this sac I found the colon and the vermiform appendix with small intestine.

I was called last fall to a case of strangulated umbilical hernia, and finding the patient collapsed, and no time to be lost, instructed the husband to give chloroform while I operated with my pocket-case instruments. For suture I employed some embroidery silk lying on the table, with which she had been making doilies. After releasing the intestines I split the ring and brought together the opposite side, thus obliterating the sac and curing the hernia permanently. The patient has remained well since.

The stretching of the scar in the so-called ventral hernia after laparotomy is not a true hernia and not liable to its dangers.

Three weeks ago I saw a man who had developed typhoid symptoms, followed by rupture and escape of fecal matter from the scrotum, due to the strangulation of an old incarcerated hernia of twenty-five years' standing, caused by jumping down a cliff in the Fort Pillow massacre. The hernia was formed by a diverticulum from the bowel, and the whole mass, with the adherent sac, was one gangrenous mass, which was removed in shreds, leaving a large opening in the bowel. I had no good available tissue to close this, and used his right testicle, which I fitted into the opening, and secured by a row of stitches around its circumference being careful not to allow any stitch to penetrate the substance of the testicle. This has healed perfectly *in situ*, and the bowels have moved naturally and regularly. Some years ago Dr. Hunter reported a case to this Society, in which a man repeatedly pulled his testicle up to support an inguinal hernia, when to his surprise one day it stayed there, and finally became adherent, curing the hernia.

Dr. Keen: I think the difference of locality between lesion and pain, referred to so much this evening, will probably explain the pain in my case. I would like to ask Dr. Goodell which of the tumors in the specimen he would consider the original one?

Dr. Goodell: The intra-mural one. The great diminution would hardly have occurred otherwise.

Dr. Keen: A point elicited in our papers and discussion this evening is the reciprocal invasion of gynecological surgery by the general surgeon, and general surgery by the gynecologist. Nothing but good can come from this.

It will be mutually advantageous.

Dr. Barton: I must bow to Dr. Goodell's authority in the matter of removal of stitches; and yet my own tendency, growing out of experience, is to take them out earlier and earlier. I think that by this I avoid suppuration. There is a difference between the lax abdominal wall after the removal of a thirty or forty pound tumor, and the condition of that wall after operations of the class I have been most engaged in. In these the great tension often causes suppuration if they are permitted to remain long. In order to afford support after removal of stitches, I have been in the habit of taking two large pieces of adhesive plaster, and cutting a series of tails upon each, and fastening one piece on each side of the abdominal incision. These plasters are long enough nearly to reach the spine on each side, they are laced in front with heavy thread, and are tightened as necessary by taking up the slack in the thread.

Dr. John B. Roberts read the following description of

THE LOOFAH, A VEGETABLE SKIN-SCRUB FOR ASEPTIC OPERATIONS.

The necessity of scrubbing the integument thoroughly with soap and water, in order to remove dirt and secretion, before operating aseptically upon the part, has recently compelled the provident surgeon to carry with him to operations a bristle brush, such as is used for cleaning hands and finger nails. I have recently saved myself the expense of supplying brushes for emergency operations, and avoided the inconvenience of carrying away from the patients' houses such wetted brushes, by using portions of the peeled and macerated fruit of the loofah or towel gourd (*Luffa Ægyptica*). A few of these segments are carried in my operating-case at all times, and, when once used, are thrown away. According to the London *Chemist and Druggist*, this gourd is grown extensively in the West Indies as well as in Africa and Arabia; but I am told it can be cultivated in Philadelphia gardens. It is a cucurbitaceous plant, with fleshy fruit which resembles, in shape and size, the Indian clubs used for calisthenic exercises. When the epidermis, mucilaginous pulp, and seeds are removed from this fruit, there remains the fibrous network or skeleton, which, when dried, acts so well as a scrubbing brush for the skin. This dried skeleton, when wet, is harder than a sponge, though perhaps rather softer than a bristle brush, and acts exceedingly well as a skin-scrub for obtaining an aseptic condition of the skin. I have been able to get with it sufficient friction not only thoroughly to clense the skin, but also to produce in a few moments an erythema. This could hardly be accomplished by so soft an article as a sponge, which is, on account of its softness, unsuited for a surgical cleanser.

The prepared skeleton, or loofah, as it is called commercially, is cut, transversely to its long axis, into pieces about two inches long, which, if desired, may afterward be split longitudinally. For my own use, I prefer the unsplit segment, which seems to have a rather rougher and harder surface, and better removes the dirt and secretions from the crevices of the skin. As the entire loofah can be bought for a few cents, these segments—of which from five to ten can be made from each—cost not more than two cents apiece; to throw them away after using is, therefore, no great extravagance.

It will be understood, I trust that this material is available for scrubbing the skin of the patient, but it is not suitable for cleansing the space under the surgeon's nails; for that purpose I always carry a toilet nail brush. My advocacy of the loofah is for cleansing the skin of patients at whose houses a brush for cutaneous purification is often not readily obtainable, though a new and clean scrubbing brush, such as used for floors, would be perfectly satisfactory.

I buy the loofahs which I use in private practice, and at the Polyclinic, of Genois & Laubach, 2201 Chestnut Street, who seem to have been the chief importers of the article in Philadelphia.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

Ninetieth Annual Meeting, held at Baltimore. April 24, 25, and 26, 1888.

(Specially reported for the MARYLAND MEDICAL JOURNAL.)

THURSDAY APRIL 26.—THIRD DAY.

REPORT OF THE SECTION ON SANITARY SCIENCE.

Dr. George H. Rohé chairman, after speaking of the large number of deaths from contagious disease he divided them into two classes:

1. Imported or exotic.
2. Domestic.

He mentioned three means of preventing contagious diseases.

1. Compulsory notification.
2. Isolation.
3. Prompt disinfection.

Dr. John Morris then made a supplementary report on

SANITARY OBJECTS IN COMMON USE.

He enumerated trees, ice boxes, refrigerators and filters.

The papers of this section were discussed by Drs. John S. Conrad, John Morris, William B. Canfield and George H. Rohé

REPORT OF SECTION ON ANATOMY AND PHYSIOLOGY.

Dr. Thomas S. Latimer read a paper on

REFLEXES.

REPORT OF SECTION ON PSYCHOLOGY AND MEDICAL JURISPRUDENCE.

Dr. John S. Conrad made a report.

Dr. Charles G. Hill read a paper on

INEBRITY IN ITS RELATION TO INSANITY.

The discussion was carried on by Drs. John Morris, R. H. Goldsmith and P. C. Williams.

REPORT OF SECTION ON OPHTHALMOLOGY AND LARYNGOLOGY.

Dr. Samuel Theobald, chairman, read a paper on

COCAINE.

REPORT OF SECTION ON MICROSCOPY, MICROCHEMISTRY AND SPECTRAL ANALYSIS.

Dr. William B. Canfield presented a paper on the

MICROSCOPICAL EXAMINATION OF URINARY ANALYSIS.

Dr. W. R. Monroe read a volunteer paper on

OXYGEN AS A THERAPEUTIC AGENT.

Dr. Whitfield Winsey read a volunteer paper on

SOME THOUGHTS ON BLOOD-LETTING.

This paper was discussed by Drs. Henry Salzer, P. C. Williams, S. C. Chew, A. B. Arnold, James Carey Thomas, J. W. Chambers, William Richert and R. H. Goldsmith.

Dr. Charles O'Donovan, Jr., read a paper on a case of

URETHRAL STRICTURE IN THE MALE.

Dr. Salzer read a paper on

DIETETICS IN FEBRILE DISEASES.

Dr. J. H. Branham read an interesting paper on

EXCISION OF THE LARYNX WITH REPORT OF A CASE.

He gave an account of an operation performed on a patient at Bayview.

Dr. J. H. DeWolf read the final paper on the

URGENT NEEDS OF THE MEDICAL PROFESSION.

ELECTION OF OFFICERS.

The following officers were elected for the ensuing year:

President, Dr. John Morris.

Vice-Presidents, Drs. J. E. Michael and T. B. Evans.

Secretary, Dr. G. L. Taneyhill; Assistant Secretary, Dr. R. T. Wilson; Corresponding Secretary, Dr. J. T. Smith; Reporting Secretary, Dr. W. B. Canfield; Treasurer, Dr. W. F. A. Kemp.

Executive Committee—Drs. I. E. Atkinson, P. C. Williams, G. W. Miltenberger, G. H. Rohé and T. S. Latimer.

Examining Board for the Western Shore—Drs. S. C. Chew, C. H. Jones, L. McLane Tiffany, H. M. Wilson, Sr., and B. B. Browne.

Examining Board for the Eastern Shore—Drs. B. W. Goldsborough, G. E. Atkinson, A. H. Bayley, James Bordley and J. H. C. Jacobs.

Library Board—Drs. B. B. Browne, G. L. Taneyhill, G. H. Rohé, T. B. Brune and W. H. Welch.

Publication Committee—Drs. G. L. Taneyhill, W. F. A. Kemp, C. O'Donovan, Jr., J. D. Iglehart and P. H. Reiche.

Committee on Memoirs—Drs. E. F. Cordell, W. S. Forwood, D. W. Cathell, J. R. Quinan and A. Williams.

Committee on Ethics—Drs. S. C. Chew, H. M. Wilson, T. L. Latimer, T. B. Evans and R. H. Thomas.

Curator—Dr. C. Johnston, Jr.

On Surgery—Drs. Randolph Winslow, O. J. Coskery, S. T. Earle, John G. Jay and R. W. Johnson.

On Practice of Medicine—Drs. J. S. Lynch, W. B. Canfield. Wm. D. Booker, J. E. Gibbons and David Streett.

On Obstetrics and Gynecology—Drs. T. A. Ashby, L. E. Neale, Thomas Opie, C. W. McGill and C. H. Riley.

On Materia Medica and Chemistry—Drs. T. Barton Brune, W. B. Platt, J. H. Branham, Whitfield Winsey and Henry Salzer.

On Sanitary Science—Drs. W. C. Van Bibber, Frank Donaldson, Sr., J Carey Thomas, C. H. Jones and J. H. Grimes.

On Anatomy, Physiology and Pathology—Drs. Wm. H. Welch, F. T. Miles, G. J. Preston, J. W. Chambers and H. Rolando.

On Psychology and Medical Jurisprudence—Drs. R. Gundry, C. G. Hill, J. H. Conrad, Wm. Lee and G. B. Reynolds.

Section on Microscopy, Micro-Chemistry and Spectral Analysis—Drs. C. Johnston, Sr., W. T. Councilman, W. C. Kloman, W. P. Morgan and R. B. Morison.

Section on Ophthalmology, Otology and Laryngology—Drs. H. C. McSherry, J. N. Mackenzie, A. Friedenwald, H. Harlan and W. J. Jones.

Delegates to the American Medical Association—Drs. G. H. Rohé, J. T. Smith, G. L. Taneyhill, W. C. Van Bibber, R. T. Wilson, William Whitridge, T. A. Ashby, John Barron, James Bosley, J. W. Chambers, J. J. Chisolm, T. B. Evans, W. F. A. Kemp, C. H. Jones, J. S. Lynch, T. F. Murdoch, John Neff, John Morris, C. H. Ohr, G. Ellis Porter and H. T. Rennolds.

Delegates to Pennsylvania State Medical Society—Drs. J. Carey Thomas, J. H. De Wolf, G. H. Rohé and R. Gundry.

Delegates to West Virginia State Medical Society—Drs. L. McLane Tiffany, J. L. McComas, J. W. Chambers, J. G. Wiltshire and J. S. Conrad.

Delegates to Virginia State Medical Society—Drs. J. N. Mackenzie, H. H. Biedler, G. B. Reynolds and C. T. Bevan.

Delegates to North Carolina State Medical Society—O. J. Coskery, J. E. Michael and F. T. Miles.

The Committee appointed to increase the membership is: Drs. T. A. Ashby, Jackson Piper, William Lee, A. C. Pole, S. T. Earle, T. B. Evans, C. H. Jones and J. H. Branham.

Correspondence.

BALTIMORE, April 16, 1888.

Editor Maryland Medical Journal.

DEAR SIR:—In your issue of April 7th I reported 26 cases of gastro-enteritis from my service in the Grace Church Free Dispensary.

Dr. Fayette M. Latham wrote me at once that he also had a number of similar cases in his service at the University

of Maryland Clinic, and he has to-day kindly sent me a complete list to April 1st.

The characteristic symptoms seem to have been the same, as in my own cases, viz: anorexia, severe cramp-like abdominal pain, often vomiting, and frequent fluid stools.

Many more cases applied than are here reported, but being among former patients of the clinic, they were entered in various places throughout several volumes and their record thus lost. His cases also yielded readily to treatment, which was in addition to regulating the diet a tablespoonful of the following mixture:

℞.—Tinct. Krameriæ	fl. oz. j.
Mist. cretæ	fl. oz. iij.

M. Fiat mist.

Sig.—One tablespoonful P. R. N.

If the case was seen early in the disease this was usually preceeded by a suitable dose of castor oil or Epsom salt.

Sometimes tr. opii camph. was added to the above.

Seven cases of dysentery occurring among these were treated with small doses of Epsom salt, bismuth subnitrate and tr. opii.

Dr. Latham's cases:

In January,	24	(beginning Jan 7.)
In Feb.	18	
In March,	22	
Whole No.	64	
White,	21	
Colored,	43	
Total,	64	

Thus we have seen 90 cases in all, reported from two dispensaries alone, in less than three months. Nothing definite has been heard from the other eight or nine dispensaries in Baltimore, or from the private practice of our physicians.

Locality.—The cases occurred in various parts of West Baltimore, from streets and alleys where dispensary patients usually reside. They come from a large section of the city, not more than three from any one street or alley. Some of the streets are S. Eutaw street, W. Lombard street, St. Vincent's alley, Dover street, Iceland street, Raborg street and and Elbow Lane.

It is a noticeable fact that this epidemic began in January, and has lasted until at least April 1st, with little abatement. It is not probable that the warm weather, close at hand, will cause any improvement.

The cause of the trouble ought to be sought out and removed. There is every probability that it is due to some persistent defilement of our water supply, such as could be caused by an inflow of sewage, and an inspection of the water shed and reservoirs cannot be begun too soon. Very truly yours,

WALTER B. PLATT, M.D.
859 Park Avenue.

AN ELIXIR OF PARALDEHYDE.—The following formula has been used with moderate success, though many physicians who have tried paraldehyde have given up its use, chiefly from the disagreeable breath acquired by those who take it:

Paraldehyde	f℥ij.
Spirit of chloroform	f℥iij.
Tinct. of vanilla	f℥ss.
Syrup of raspberries	f℥ss.
Aromatic elixir; enough to make	f℥iv.

Dose for adults, two fluid-drachms, containing one fluid-drachm of paraldehyde.—*American Druggist*, March, 1888.

SALICYLATE OF BISMUTH IN DYSENTERY AMONG CHILDREN.—Hale, of the Philadelphia Polyclinic, has obtained excellent results in the use of the following prescription:

℞—Bismuthi salicyl.	f 3 ij.	
Tr. capsici	gtt. xij.	
Spts. ammon. aromat.	f 3 iss.	
Pulv. acaciæ	3 ij.	
Aq. cinnamomi q. s. ad.	f ℥ ij.	M.

Sig.—Teaspoonful every two hours, for a child from three months to one year of age.—*The Polyclinic*, March 1888.

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BALTIMORE, MAY 5TH, 1888.

Editorial.

DR. STERNBERG ON YELLOW FEVER.—The extravagant claims made by Domingos Freire, of Brazil, some months ago, to the effect that he had discovered not only the germ of yellow fever but a vaccine against this disease, aroused considerable interest in his work and a warm discussion concerning its value. There were many who believed Freire an enthusiast and a self-deceived fraud, whilst others were willing to accept his statements as correct. Acting under a strong professional pressure the President was induced to send Dr. Sternberg to Brazil to investigate Freire's methods and to report on their scientific value. Dr. Sternberg has spent the past year in Brazil and Mexico in pursuance of his allotted task. He first proceeded to Rio de Janeiro where he made himself acquainted with the work of Domingos Freire, and after his return from that country proceeded to Mexico where the methods of inoculation practiced by Carmona y Valle were investigated. Dr. Sternberg returned to this country a short time ago and during his stay has been induced to make a preliminary report in a paper read before the College of Physicians of Philadelphia. In this paper Dr. Sternberg analyses Freire's and Carmona y Valle's work in detail and shows that the claims of these two men cannot be substantiated. He is forced to arrive at the conclusion that the discovery of the germ of yellow fever has not been satisfactorily demonstrated and there is no evidence to show that the method of inoculation practiced by Freire has any prophylactic value.

Dr. Sternberg will shortly go to Havana for the purpose of continuing his researches with reference to the etiology and prophylaxis of yellow fever.

The preliminary account published indicates that he has given extremely careful and painstaking study to the work assigned him. We may expect important conclusions from his stay in Havana.

HYPNOTISM.—The increasing interest in the subject of hypnotism, on both sides of the ocean, has led honest investigators to look more fully into this subject and see what it is worth. The French having recovered from the first wave of enthusiasm, have sobered down, and are taking a more scientific view of the matter. The Germans too are giving it a fair and honest trial. In America it has not so largely occupied the scientific mind. As an interesting study in psychology, it may be studied purely from a non-medical standpoint. Recent workers in this country, and even in this city, feeling that there was much humbug in this subject, as it was now practised, have determined to give it a thorough test and endeavor to find its true merits.

The three stages of hypnotism as recognized by the majority of writers are, the lethargic, the cataleptic, and the somnambulistic. In the somnambulistic state the subject is entirely under the control of the operator, and it is needless to say that such power is not without danger to both parties. Subjects may be made to sign important papers of any kind, and thus lead to serious trouble; also, as in the case of most French operators, if the subject be a good-looking young woman, she runs a risk which most French subjects do not escape.

M. Luys, who has been entirely carried

away with hypnotism, has found his subject in the person of a young and attractive girl, and with her he has gone through different phases of this craze, in a way which, although possibly not improving to his subject, has done great good by showing up the fallacies and weakness of at least a part of this subject. Among other things he found that in the lethargic state his subject was peculiarly susceptible to certain medicines which acted with different effects according as they were presented to the side, front or back of the neck. A committee appointed by the Academy of Medicine to investigate this, reported that after careful experiments with drugs of power and also with inert substances, the effect produced by these drugs was purely due to suggestion, and that although M. Luys had evidently acted in good faith, still his experiments were worthless from a scientific standpoint. It is to be hoped that the many obscure points of this subject will be more thoroughly studied and be explained in a natural way, as it cannot be denied but that many of the experiments are witnessed with a feeling of wonder even by those who think they understand much of it already.

The Etiology of Fever.—A question not easy to answer in the study of fever is, What is its etiology? Welch, in his elaborate investigations on this subject, says that the general etiology of fever relates mainly to a consideration of the agents producing fever, the so-called pyrogenic substances. For convenience of description the fevers are divided by the older authorities into a hundred or more different kinds, and this has been gradually simplified until now fever is generally described as symptomatic and essential. This division, however, seems to be uncertain, and the boundary hazy and ill-defined. Traumatic fevers are more easily explained by the absorption of pyrogenic substances from the inflammatory district. From a series of experiments upon the physiology of the blood and from the oft-repeated observation that fever and other injurious effects may follow the transfusion of blood, especially when the blood of one species is transfused into an animal of another species, it was believed that fibrin-ferment was the pyrogenic agent causing fever and other injurious symptoms. Following these experiments other investigators studied other ferments with reference to their pyrogenic power. Schmiedeberg injected histozyme, a substance concerned in the dissociation of the nitrogenous constituents of the tissues; others made injections of pepsin, trypsin, a ptomaïne called pepto-toxin, leucin, papoytin, neurin and the ordinary commercial papoid. In spite of all these experiments the substances causing fever have not been isolated, although it does seem as if the liberation of an excessive amount of fibrin-ferment in the blood was caused by all these agents, thus bringing about fever. However uncertain these experiments may be on animals, we may assume that some of these pyrogenic substances are present in small quantities in the blood, and if in an excessive amount they cause fever. Bacteria also give rise to poisonous substances which cause fever. Brieger isolated from a pure culture of the typhoid bacillus a poisonous substance which he called typho-toxin; also from a culture of the tetanus he obtained a substance which he called tetanin. Thus the presence of pathogenic bacteria may cause fever not only by their presence in stopping up the capillaries and causing thromboses and other dangerous symptoms, but also by weakening the powers of resistance against the invasion of various micro-organisms. There are thus three agents concerned in the production of fever, viz: unorganized ferments and other relatively homologous substances; ptomaines and other chemical products of saprophytic micro-organisms; and pathogenic micro-organisms and their chemical products. Fever also occurs as a reflex neurosis, as is observed in teething, in the passage of gall-stones or urinary calculi after the insertion of a catheter, etc. What the significance of

fever is, it is not easy to say, but it is more than probable that the increased oxidation of fever aids in the destruction of injurious substances in the body.

The Johns Hopkins University.—Already the medical profession of this country, and we might add of the civilized world, is beginning to see some of the work of the Medical Department of Johns Hopkins University, which has been in process of organization for some few years past. With great prudence and wisdom the Trustees of the Johns Hopkins Hospital have had erected upon their property in this city probably the most palatial system of hospital buildings in this or any other country, and in connection with the same have inaugurated a line of experimental work in pathology which is bearing most excellent fruit. The advantages for pathological study under Prof. Welch, who is at the head of this department, cannot be surpassed.

Prof. Welch is not only an untiring and painstaking worker himself, but his genial nature, rare tact and enthusiasm inspire zeal in others, so that he has surrounded himself with a corps of associates and students who are earnestly conducting original experiments in pathology which cannot fail to widen the fame of the Hopkins School as a great centre of research. The selection of Prof. Welch to deliver the Cartwright Lectures, and the able manner in which he has discharged the task assigned to him, illustrate the commanding influence of the Hopkins pathological work. The selection of Prof. Councilman to give the initial address before the Society of Alumni of Bellevue Hospital was a further recognition of the fact the Hopkins has most excellent material from which can be drawn the very best quality and character of original work. Prof. Councilman's address on "Predisposition in Tuberculosis" has drawn forth the most commendatory criticisms for its judicious and comprehensive treatment of the subject. *Apropos* to the subject we reproduce from the *New York Med. Journal* (April 28, 1888,) the following complimentary and, we think, very just reference to the Hopkins School:

"It is not unworthy of note that both Dr. Welch and Dr. Councilman came from Baltimore to address their auditors; still less that they are both professors of pathology in the same institution, the Johns Hopkins University. Taking into account the short period of time that has elapsed since the University was established, we must view it as of good omen for its career, and especially as giving evidence of the discrimination with which the members of its medical faculty have been chosen, that two of its professors should have been called simultaneously to such important work as that of addressing the Alumni Association of the College of Physicians and Surgeons and the Society of the Alumni of Bellevue Hospital. The prominence already achieved by the Johns Hopkins University goes far as a token of Baltimore's progress as a seat of teaching institutions."

Miscellany.

Hyperperexia in Acute Rheumatism Treated by Ice-Pack.—Dr. William M. Ord related this case before the Clinical Society of London, March 23rd, 1888. The patient was a man, aged 32, a heavy beer drinker, who had contracted, three weeks before admission to St. Thomas's Hospital, a sharp attack of acute rheumatism, referred to exposure to cold. On admission he was found to have acute inflammation of many joints, marked signs of pericarditis, and slighter signs of endocardits, with some pleurisy. His temperature was 102.4°, the respirations were quickened, the urine contained one-sixth of albumen and very little chloride. He was slightly delirious. Two days later the delirium had increased to such a degree that it was necessary to remove him from the large ward to a single-bedded ward. He was very violent, had hallucinations and delusions, and was with difficulty kept

in bed. The delirium strongly suggested the existence of hyperpyrexia, but the temperature was only 101.4°. After this the temperature rose steadily, till at 4 A. M. on the morning of the fourth day from admission it reached 108.4°, while the patient had fallen into a state of restless unconsciousness, with tremors. The ice-pack was now applied, and was maintained for four hours, at the end of which the temperature was 100°, the patient had recovered consciousness and spoke sensibly, and the pulse had fallen from 160 to 100. During the next few days the temperature, after a first rise to 103.4°, kept between 100° and 101°. The signs of pericarditis disappeared, but those of endocarditis remained. The joint affection had greatly decreased, and the albumen had disappeared from the urine. On the seventh day after admission temperature again began to rise, and at 2 A. M. on the morning of the eighth day was 105.4°, the patient having passed through delirium into restless unconsciousness. The ice-pack was again applied. By 5 A. M. the temperature was 100°, and the patient had recovered consciousness. After this the patient made a steady recovery, and was discharged six weeks after admission in good general health, and without sign of lung or heart disease. The treatment was effectively carried out by Dr. Ord's house-physicians, Dr. Wheaton and Mr. Macevoy. Dr. Ord brought the case before the Clinical Society, not because it presented anything new or original, but with the intention of emphasing the value of cold applications to the surface of the body in hyperpyrexia. He urged that, notwithstanding the acknowledged value of the various antipyrectic drugs in pyrexia, their use in hyperpyrexia was comparatively unsafe, large and frequent doses being required, whereby toxic symptoms were often produced. He admitted that the bath treatment was not of universal applicability, but pointed out that it involved no poisoning, and had a remarkable effect, not only in reducing temperature, but in restoring the nervous system to a natural condition. The rapid disappearance of inflammation in the thoracic viscera and joints was also noteworthy.

A Good Domestic Disinfectant.—The *American Druggist* recommends the following solution:

Sulphate of zinc, commercial	16 tr. oz.
Sulphate of iron, crystallized	16 tr. oz.
Hypophosphorous acid (10 per ct.)	120 minims.
Oil of thyme	60 minims.
Naphthol	15 grains.
Water enough to make	5 pints.

Dissolve the two salts in four pints of boiling water, add the naphthol, and the oil of thyme, and shake or stir the mixture frequently while it cools. Then add the hypophosphorous acid, and make up the volume with water to five pints. Shake or stir the mixture frequently during a few days, then filter it through a wetted filter.

This solution will have a very handsome green color, and resist oxidation for a long time.

For use, it may be directed to be diluted with from five to ten parts of water, the strength depending upon the work it is expected to do.

A Committee appointed by the Chicago Med. Society to investigate the priority of the discovery of chloroform, made the following report.

There are three claimants to the honor of the discovery; Liebig, of Germany, Soubeiran, of France, and Guthrie, of America.

Liebig's Claim.—Liebig claims to have published his discovery in November, 1831. (See *Liebig's Annale*, vol. 162, page 161.)

Soubeiran's Claim.—Soubeiran claims to have published his paper on ether bichlorique in October, 1831, in the *Annales de Chimie et de Physique.*

Liebig shows (see *Liebig's Annalen*, vol. 162, page 161) that the October number of the *Annales de Chimie et de Physique* was delayed in its publication, and that it did not appear until January, 1832. It certainly is evident that it was not published in October, as it contains the meteorological report for the entire month of October.

Guthrie's Claim.—In the January number, 18. 2, of Silliman's *American Journal of Science and Art*, we find an

article by Dr. Samuel Guthrie, dated September, 1831, in which he says, "A bottle and phial contain alcoholic solution of chloric ether. The contents of the phial are as strong as I could conveniently prepare them, but not equal to some which I made not long ago."

In the October number, 1831, of the same journal, (page 64, vol. xxi) we find an article by Dr. Guthrie, without date, upon a "New Mode of preparing a Spirituous Solution of Chloric Ether," in which he says, "During the last six months a great number of persons have drunk of the solution of chloric ether not only freely, but frequently to the point of intoxication."

We find a notice to contributors in Prof. Silliman's journal, in which he says, "Communications to be in hand six weeks, or when long, and especially with drawings, two months before the publication day."

Dr. Guthrie's paper on chloric ether must then have been in the hands of the printer in July or August, 1831. And if people had drunk of his chloric ether for six months it would place the date of his discovery in the early part of 1831.

We therefore conclude that Dr. Samuel Guthrie is justly entitled to the honor of first discovering chloroform, and that the publication of his discovery antedates that of either Liebig or Soubeiran.

Typhoid Fever as Affected by the Public Water-Supply of Vienna.—In this paper, by M. Mosny, the oft-repeated observation as to the influence of a pure water-supply in reducing the mortality from typhoid fever receives a new and vigorous confirmation. Other diseases have been diminished in like manner. Not a single death from dysentery has occurred since 1880 in Vienna. The water supply of Vienna up to 1861 was partly from wells, of which there were then about 10,000 in use, and, as might have been expected, water-pollution was the rule. There were also public and private aqueducts conveying water from the Danube canal, and finally a more thorough public supply from distant springs of undoubted purity.

The prevalence of typhoid fever and, notably the endemic of 1877 was mainly in the houses not supplied with the public spring-water supply.

In concluding this article the author says, "We conclude that water is the principal agent in the transmission of typhoid fever, and in order to cause this disease almost entirely to disappear from a large city where it is endemic, it is only necessary to furnish to the inhabitants water of unquestionable purity, and in sufficient quantity."

The population supplied from the new source in Vienna is 764,000, and the consumption per capita 170 litres per day (about 45 gallons).—*Boston Med. and Surg. Journal.*

Treatment of Ringworm.—It affords us pleasure to note that two of our French *confrères* commend in the treatment of this affection the method proposed by our countryman, Dr. Reynolds, of Chicago. Dr. Charon and Dr. Gevaert report (*Jour. de Méd.* de Brux., Nov. 20, 1887, p. 673) excellent results in the treatment of ringworm by the use of galvanism, the positive pole with its electrode, saturated with a three- to five-per-cent solution of bichloride of mercury being applied to the diseased spot for ten or fifteen minutes. They found that even with a three-per-cent. solution considerable burning was caused, although but a moderate current was employed. This they take for evidence that the mercury penetrated the tissues, as the same current without the mercury produced no discomfort. The average duration of treatment was about four weeks.—*N. Y. Med. Jour.*

The Treatment of Flatulent Dyspepsia.—The *Journal de Médecine* of March 11, 1888, gives the following formula:

Bismuth. subnit.,	
Magnesiæ pulv.	āā gr. 30.
Belladon. pulv.,	
Zingib. pulv.	āā gr. 3.

Mix carefully and divide into ten powders.

A powder should be taken in peppermint water twice daily.—*Med. News.*

Medical Items.

The American Gynecological Society has changed its next place of meeting from Boston to Washington, D. C., and time of meeting from September 18, to 20, 1888.

It is announced that the University of Pennsylvania will confer the degree of LL.D. on Prof. D. Hayes Agnew, at its next commencement.

Mrs. Lozen, M.D., Dean of the New York Medical College and Hospital for Women, died April 26. She was a pioneer in the movement for the medical education of women.

A sanitary convention is to be held at Lewisburg, Pa., under the auspices of the State Board of Health, on Thursday and Friday, May 17th and 18th.

Magistrate—"Have you no written document to prove your wife is really dead?" Peasant—"I have the doctor's bill."—*Fliegend Blätter.—Exchange.*

A cure for red noses is given by a correspondent of the *Briiish Medical Journal*, who was himself a sufferer. It consists in free scarification, at first twice a week, then less often.—*Med. Rec.*

The death-rate in New York City is 26 per 1,000 whilst that of London is only 20 per 1,000. The chief causes of the excess of mortality in New York are diphtheria and croup, diarrhœal diseases, phthisis and disease of the kidneys. Overcrowding seems to be the chief factor at work in inducing these diseases.

The American Associotion of Genito-urinary Surgeons, which forms a part of the Congress of American Physicians and Surgeons, will hold its next meeting in Washington on Tuesday, Wednesday, and Thursday, September 18th, 19th, and 20th. The preliminary programme includes the titles of a large number of papers.

Dr. Root, of Georgetown, Mass., recently reported in the *Boston Medical and Surgical Journal* a family in which there were six living generations. Dr. Walter Channing in the same Journal now reports a family in which there are five living generations, their ages being respectively 81, 63, 42, 20 years and an infant 5 months.

The Marshall Hall prize, which is given every fifth year for the best original work done and recorded in the English language during the previous quinquennium in physiological and pathological researches relating to the nervous system, has been awarded recently to Dr. Walter Holbrook Gaskell, F.R.S., Lecturer in Advanced Physiology in the University of Cambridge.

Sir Morell Mackenzie and Mr. Hovell have brought an action for libel against the *Cologne Gazette* and the *Kreuz Zeitung* for publishing an account of an alleged incident in connection with the Emperor's illness on the 11th inst. These papers published sensational items of news stating that the Emperor was almost throttled owing to the clumsy treatment of Drs. Mackenzie and Hovell in placing the rectangular cannula in his throat, and that Dr. Mackenzie had to send for Dr. Bergmann, who was only just in time.—*Medical Record.*

The sixth annual commencement of the Woman's Medical College of Baltimore was held on May 2nd, at 4 o'clock P. M., in the hall of the Young Men's Christian Association. The degree of M.D. was conferred upon Ida C. Coler, Ohio; Mary P. Dole, of Mass., and M. Lizzie Zimmerman, of Md. The Faculty prize, a gold medal, was awarded to Mary P. Dole for having obtained an average above 90 out of one hundred in all branches taught in the school. The second honor was awarded to M. Lizzie Zimmerman. The Valedictory address was delivered by Rev. Wayland D. Ball.

The American Association of Obstetricians and Gynecologists was recently organized at Buffalo, New York. Its membership is limited to obstetricians, gynecologists and such such surgeons who are interested in abdominal surgery connected with these specialties. The following officers were elected: President, Dr. W. H. Taylor, Cincinnati; Vice-Presidents, Drs. E. E. Montgomery, Philadelphia, and J. H. Carstens, Detroit; Secretary, Dr. W. W. Potter, Buffalo; Treasurer, Dr. X. O. Werder, Pittsburg; Executive Committee, Drs. Thomas Opie, Baltimore; J. H. Etheridge, Chicago; C. Cushing, San Francisco; M. Storrs, Hartford; and Byron Stanton, Cincinnati. The new Association will hold its next meeting in Washington, D. C., September 18, to 20, 1888.

Mr. Matthew Arnold, whose death only recently occurred from heart disease, is said to have had mitrial and aortic trouble for a quarter of a century. "Twenty-five years ago," says the *British Medical Journal*. "he consulted Dr.—now Sir Andrew—Clark, and was told that he had valvular disease of the heart, but advised that if he exercised reasonable care it need not at all interfere with his career. For many years he rigidly adhered to the recommendations as to regimen and exertion which were given to him, and it is interesting and encouraging to recall that nearly all his serious work in criticism, education, and theology was done within the last twenty-five years." "Such a life is a striking proof that heart disease, even of a type generally accounted serious—for Mr. Arnold had disease of the mitral and aortic valves—need not interfere with the labors or the enjoyments of a successful career, provided only that the limitations and moderate restrictions to which the individual must submit are frankly recognized."

Original Articles.

LECTURES ON THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHÉ, M.D.,

Professor of Dermatology and Hygiene in the College of Physicians and Surgeons, Baltimore.

Lecture IV.

THE PUSTULAR SYPHILIDE.

The pustular syphilide is generally the result of a breaking down of a papular eruption, and were it not for its clinical importance should be described as a sequel of the papular lesions. It is met with in several forms, but a sufficiently accurate classification is into two varieties, the small, or miliary and the large, or lenticular pustular syphilide.

a. The Small Pustular Syphilide.

[Synonyms: Herpetiform syphilide, syphilitic acne, miliary syphilide, impetiginous syphilide, syphilitic impetigo.]

The small pustular syphilide generally results from a transformation of small papules. The apices of the papules become converted into a small collection of pus which dries into a thin fragile crust. The eruption is localised upon the same portions of the surface affected by the small papular syphilide, namely the face, shoulders, and trunk. It is sometimes disseminated over the whole surface, and at others especially localised in groups about the joints, the hairy margin of the scalp, and the genital region. The pustules are usually acuminate, but rarely prominent. They are sometimes arranged in circular or crescentic figures. The hair and sebaceous follicles are favorite seats of the eruption. When involution of the lesion takes place the contents of the pustule dry up, the infiltrated base diminishes in size and absorption of the papular lesion is followed by a small spot of pigmentation which gradually disappears, leaving the skin normal in color, or marked with white spots showing atrophy of pigment. Sometimes, however, a small ulcer remains which may take on destructive action and spread. Moderate febrile movement usually accompanies the development of pus in the papular lesions. The course of the eruption is very slow when untreated, the lesions succeeding each other in crops for three, four, or even six months.

The pustular syphilide is especially frequent in the colored race. Among whites, it, as a rule, affects only subjects of depressed vitality, for example, individuals whose health is broken down from overwork, underfeeding, exposure or intemperance. It may occur, however, in persons of apparently vigorous health. In these cases some authors look upon it as an evidence of affection by a malignant form of syphilis. I cannot agree to this view. In my opinion, malignity in syphilis as in other infectious diseases, is a clinical peculiarity depending upon the individual and not upon the infectious material.

Differential Diagnosis of the Small Pustular Syphilide.

The striking similarity to acne which has given to the small pustular syphilide one of its synonyms, points to a source of difficulty in diagnosis. The distribution of the eruption upon the face, breast and back as well as the appearance of the lesions in acne closely resemble the syphilitic manifestation. A careful examination will, however, detect objective differences in the lesions themselves without the aid which the history of the case will give. In acne the papulo-pustules are painful, with a larger inflammatory base; the lesions are in varying stages of development, the pus is usually more deeply situated, reaching the surface from below, and when the pus is evacuated the involution of the infiltration is comparatively rapid. The crustiform scab of the syphilitic lesion is rarely seen in acne. The absence of pain or other subjective symptoms in the pustular syphilide is also an aid in making the differentiation.

Rarely, cases of pustular eczema, especially when affecting the lower extremities may be mistaken for the small pustular syphilide. The other clinical features of eczema, itching, diffused infiltration and discharge will enable the distinction to be made with little difficulty.

b. The Large Pustular Syphilide.

[Synonyms: Lenticular pustular syphilide, syphilitic ecthyma, variolaform syphilide, syphilitic acne, rupia].

The large pustular syphilide presents itself in a greater number of varieties than the form just described. Its lesions vary in size from a split-pea to a thumb-nail or larger. The pustules may be elevated above the surface, or flat. They are always seated upon a distinctly infiltrated base and in the course of their involution become covered with crusts which may attain a large size. The lesions are usually disseminated over the surface, generally sparing the palms and soles. After the crusts fall off, the infiltrated base may undergo a slow involution and absorption, or continue as an ulcerative lesion to be more fully described later.

Rupia is a variety of the large pustular syphilide. The lesion consists of a pustular ring whose centre is occupied by a large irregularly pyramidal crust. The pustular ring is surrounded by a violaceous or bluish areola. The pustule and crust increase in size by peripheral extension. The base of the lesion consists of a shallow ulceration with a bloody ichorous discharge on its surface.

Differential Diagnosis of the Large Pustular Syphilide.

The large pustular syphilide must be differentiated from small-pox, varicella, acne, pemphigus, impetigo contagiosa, and various non-specific pustular affections described by authors under the names of impetigo, ecthyma, etc.

In negroes the pustular syphilide is at times strongly suggestive of small-pox. If a clear clinical history can be obtained, the differentiation is usually not difficult, but at times much doubt must occur. Thus a colored man lately presented himself in my clinic in whom a disseminated pustular eruption covering nearly the entire body had followed a possible exposure to small-pox. The case came under observation just about the time when a small-pox scare was creating a little excitement. The lesions were strikingly like small-pox, with the exception that there was no umbilication of the pustules. This feature is, however, not an essential of the variolous exanthem except at a certain stage. The appearance of lesions in varying stages of development, the length of time the eruption had been out, and the absence of fever or systemic depression led to an examination of the penis which disclosed a sclerotic infiltration in the frenum preputii, and enlargement of the lymphatic glands of the groin. A diagnosis of pustular syphilide was made which was confirmed by the subsequent history of the case.

In cases where the eruption is sparsely distributed the lesions sometimes assume the characters of varicella. The diagnosis in such cases can never be long in doubt for the varicellar exanthem rapidly dries up, and besides is very rare in adults, who are most likely to be the subjects of acquired syphilis. Acne is sometimes mistaken for the large pustular syphilide, but the diagnostic marks of this disease pointed out above should suffice to distinguish the two affections.

A variety of the large pustular syphilide termed by some authors, the bullous syphilide may sometimes be mistaken for pemphigus and conversely. The bullous syphilide is very rare as a symptom of acquired syphilis being nearly confined to children who are subjects of inherited syphilis. The "syphilitic pemphigus," so-called, is a grave symptom and differs from true pemphigus in having blebs with purulent contents, and an inflammatory border, and leaving an eroded or ulcerated base when the contents of the bullæ are evacuated or dried up. Impetigo contagiosa is so peculiar in its localisation and appearance being limited to the face and hands, evidently

contagious and rapidly drying up, the lesions passing through their periods of development and involution usually within two weeks, that only a careless observer would fail to distinguish this disease from a syphilitic eruption.

Certain non-specific pustular eruptions, described by some authors under the names of impetigo and ecthyma, are sometimes mistaken for the pustular syphilide. These lesions usually occur in debilitated subjects, and can generally be traced to some local irritation. Thus they are especially liable to occur in persons infested with pediculi, or scabies. Sometimes they are seen in individuals exposed to stress of weather, overwork and improper or insufficient food. I have seen these atonic eruptions frequently in sailors, and in the children of the poorest classes. The resemblance to the large pustular syphilide is so close in many cases that an absolute diagnosis is impossible unless the history of the patient is taken into consideration. Cleanliness, good food and rest will, however, soon cause the non specific eruption to disappear while they have slight influence upon the syphilitic manifestation.

Prognosis of the Pustular Syphilide.

The prognosis of the suppurative lesions of syphilis is less favorable than that of the other manifestations of the disease heretofore considered. The concurrent symptoms are sometimes grave. Among the most constant is fever, which may be continuous and is probably, in part at least, septic in character. Suppurative iritis, onychia, induration of the testicle, joint pains, pharyngeal and tonsillar ulcerations and alopecia are frequent concomitants. The large pustular syphilide, especially if followed by chronic ulcerative lesions is of serious prognostic significance, inasmuch as it indicates a depravement of the constitution and diminished capacity of resistance to injurious influences.

The pustular syphilide is sometimes contemporaneous with the earlier manifestations of the disease, such as the erythematous and papular eruptions. Except in colored patients, or in whites of broken-down constitutions the pustular syphilide rarely occurs within six months after infection. If treatment of the disease has been early instituted, this eruption may never appear or may be delayed for upwards of a year.

TREATMENT OF ACUTE AND CHRONIC PURULENT INFLAMMATION OF THE MIDDLE EAR (OTORRHŒA).*

BY LAURENCE TURNBULL, M.D.,
OF PHILADELPHIA.

The cavity of the tympanum, or middle ear, in health is filled with ever-renewed air by the Eustachian tube, and thus the waves of sound reach the labyrinthine nerve of the ear. It is deeply and securely situated in the temporal bone. It measures two lines from the membrana tympani inward; its breadth and height being about half an inch, and its shape is the form of a cube. The cavity of the tympanum is apparently lined with a continuation of the mucous membrane of the Eustachian tube, and yet the epithelium is distinct,—that of the Eustachian tube is ciliated, whilst in the middle ear it is tesselated, or in squares. This epithelial and subepithelial lining takes the place of a periosteum by transmitting the blood-vessels which supply the bones. This latter fact is important to notice, as any serious affection of this membrane will ultimately react upon the nutrition of the bones forming the cavity, thus resolving a severe catarrh into an osteitis. The existence of this mucous cushion is the reason why affections of the middle ear are so numerous in young children. The close contact of the jugular vein to the cavity of the tympanum exposes it to the influence of pus collecting on its floor.†

In acute otitis media, or inflammation

*Read before the Philadelphia County Medical Society, April 25, 1888.

†Extract from the author's Clinical Manual of the Diseases of the Ear, 1871 and 1878. Phila.: J. B. Lippincott Company.

of the middle ear, there are frequently but slight pathological changes in the ear, except swelling, deep redness, and small perforations of the membrana tympani. The discharge is either mucus or mucus and pus. This can be shown by the pus dissolving in water, and the mucus found floating on the top.

By the use of anodynes, cocaine, chloroform, morphia, etc., pain is relieved; with the internal use of tincture of aconite, antipyrin, frequent hot foot-baths, with local depletion, inflammation is checked. The parts should be cleansed with a mild, warm, antiseptic wash, and, as a rule, all goes well. The case generally recovers in a short time, without any permanent injury to the hearing apparatus, if not neglected. You, medical gentlemen, are all familiar with this disease in young persons and children, the latter having as many as two, three, and even four acute attacks during teething, or the result of the exanthemata or cold. This disease is now so well known, and as a rule so promply treated, that a much smaller number of cases, are now permitted to pass to the second stage of inflammation of the middle ear—the purulent variety—which causes such extensive changes in the hearing apparatus. In such cases of acute otitis media Zaufal finds exclusively the two forms of microbes found by Friedländer and Fränkel in pneumonia, viz., a large, short bacillus, encapsulated, and a diplococcus, also encapsulated. He has also shown that the exudation in acute otitis media, before rupture of the membrana tympani, contains pneumococci to the exclusion of all other micro-organisms, and that these introduced into the nasal fossæ can give rise to a meningitis without irruption of the cranial envelope.*

In collecting a large number of cases of suppuration of the middle ear, which includes three or four years, I find that out of 1700, 454 were acute, while 1246 were chronic; 18 had facial paralysis, while the balance included polypi, caries, necroses, cholesteatomata and tubercles. Let me dwell for a short time upon some of these changes, the most important and extensive of which are found, not in the meatus or that portion of the ear covered by skin, but in the mucous membrane of the middle ear, back of the membrana tympani, extending into the mastoid cells, and through the Eustachian tube to the throat and nose. After this disease has existed for some time, there is an increase of the bulk of the mucous membrane, caused by excessive infiltration with round cells, and enlargement, with new formation of vessels.

The subepithelial layer, stripped of its epithelium, is replaced by round cells; a suppurating, granulating surface, traversed by many vessels takes its place. The purulent process leads to destruction of the tissues, to ulceration and wasting of the mucous membrane, which is eaten away so that the bone is often laid bare.

This is especially the case in tubercular otitis media, purulenta, and has been demonstrated by numerous post-mortems, that they tend in a very short time (six to eight months) to extensive necrosis of those parts bordering on the diseased middle ear, and extending into the labyrinth, the rapid course of the disease being due to the existing tubercular diathesis.

It is also often the case in this form of disease of the ear, that tinnitus and impairment of hearing precede the perforation, which is most generally painless, but with rapid destruction of the drum-head. By the transformation of the round cells into spindle-shaped, there occurs a formation of a firm connective tissue, which leads to abnormal adhesions between the membrana tympani, the ossicula, and the walls of the tympanic cavity, producing permanent deafness. The membrana tympani almost always suffers a loss of its structure, and in severe and protracted cases we have large perforations.

Treatment.—These perforations are most ordinarily treated by a combination of alteratives, so as to modify the nutrition and prevent the destructive tendency from gaining headway. The local application is also of importance, especially such remedies or local means as change the surface of the granulations,

*Annales des Maladies de l'Oreille, January, 1888.

gently stimulate and cleanse them. No agent in our hands has acted so promptly and well as very finely *levigated* boric acid, alone or in combination with iodol, the latter to act as a true antiseptic, using one part of the iodol to ten of boric acid. Boric acid used alone should be sterilized, by heating before using on a platina foil, as it contains fungi and bacteria when kept for some time. The powder must be carried down to the perforation, and through it as much as possible, so as to reach the diseased mucous membrane and the Eustachian tube with the little instrument I show you. If it is blown in, it adheres to the edges of the auditory meatus, causing irritation and sometimes small abscesses. The powder has a stimulating and an astringent effect just as alum used in the same manner. It should be packed carefully, so that the diseased membrane be fully covered. It is not necessary to seal it; indeed it is almost impossible to cause the retention of the pus in the cavity, as the powder absorbs it, and the former when applied produces a watery discharge by its stimulating effect, so that the patient will be obliged to wipe off the liquid.

As to boric acid causing retention of the secretion in the treatment of necrosis of the temporal bone, or in a large perforation, it has not acted so with me. I have used boric acid since 1881, after my return from Europe, and, like its introducer, Friedrich Bezold, of Munich, I have been convinced of its efficacy in these severe cases, and that the objections to its use—*i. e.*, its causing retention of the secretions—as advocated by some, are entirely without foundation. According to his and my own experience, extending over a period of seven or eight years, its use has always been followed by favorable results, so *he* had no reason to modify his statements made in 1870,* as to its therapeutic value. He has also confirmed his opinion of the unreasonableness of these objections by a series of physiological experiments, in which he tested the capacity of absorption of powdered boric acid for fluids outside of the body, before, as well as after, saturation and drying out of the powder with purulent secretion, which, enclosed in a glass tube covered with a perforated membrane, was exposed to the influence of fluids from the ear.

This special mode of treatment is peculiarly applicable to large perforations of the membrana tympani; when the perforations are small, they are more effectually treated by a solution of boroglyceride, carbolic acid, or peroxide of hydrogen.

When the perforation is situated in the membrana flaccida or Shrapnell's membrane, with disease of the attic of the tympanic cavity, we resort to a syringe (intertympanic), or a catheter to which a soft rubber ball with a double valve is attached, to withdraw the fluid, and not let it return when diseased; either of which is inserted into the perforation, and the parts washed with a solution of peroxide of hydrogen or an antiseptic. If carious bone be found, covered with polypi, the latter should be snared, and the dead bone removed; but if the bone be found only inflamed, it should be treated by diluted nitric or carbolic acid, to stimulate the granulations and restore it to its normal condition. All tearing and cutting operations—as these tend to malignant disease—must be avoided; everything should be done with extreme care and gentleness. When pus blocks the tympanum in disease of the middle ear the tuning-fork is heard better through the air than through bone. But when the pus is removed, and the inflammation is reduced, the bone conduction will again improve, as the pressure has been removed from the labyrinth.

It has been found that functional disturbances in hearing are produced by chronic purulent inflammation, by the cicatrices and changes in the membrana tympani, and adhesions before referred to in the middle ear, after all discharge has ceased. First, the alterations in tension of the sound-conducting apparatus, caused by the cicatrices producing irregular vibrations in the membrana tympani. Second, cicatrices

*Arch. fur Ohrenheilkunde, Band xv.. and in the Aertzliches Intelligenzblatt, 1881, No. 26.

which cause adhesions of the membrana tympani with the promontory, and the articulation of the incus with the stapes, impeding the power of vibration of the ossicula. Third, if the adhesions are confined to the portion of the membrana tympani situated below the handle of the malleus, the acuteness of hearing has been found to be considerable, while adhesions in the upper half of the membrane produce more disturbance of the hearing, or deafness, especially when the handle of the malleus is drawn inward and ankylosed with the promontory. Fourth, it has been proved that imperfect hearing power may exist even in cases of extensive destruction of the membrana tympani, and with the loss of all the bones, except the foot-plate of the stapes—that is, if it were movable, and the membrane of the fenestra rotunda was not thickened. The regularity of our perception of tones is due to the deadening of the sounds produced by the ossicles, the membrana tympani can only be properly considered as a sound conductor in connection with the ossicles. Even if fair hearing of speech and music remain, the removal of the membrana tympani, or protecting membrane of the tympanic cavity, is dangerous to life, for it is deprived of a covering which is essential to its continuation in health. To retain and to restore to a healthy condition the diseased and ulcerated bones of the ear and the membrana tympani, is of the utmost importance.

Extension of this chronic purulent disease of the ear by the Eustachian tube as a pus-carrier, produces disease of the upper part of the nasal cavity, by developing polypi, enlarging the pharyngeal tonsils, adenoid growths, and hypertrophic enlargements of the turbinated bones and ozœna.

We fully agree with Politzer, that combinations of ozœna with disease of the ear are much rarer than we would suppose, from the extension of the process toward the entrance of the Eustachain tube. Where the ear is implicated, the mucous membrane of the middle ear becomes most frequently sclerosed. In many cases of deviations of the septum we have found perfect hearing, unless complicated with prior ear disease, or exostitis extending through the whole line of the meatus; these are removed by the dental engine. Such cases suffer from coryza or cold in the head, commonly so called, but are promptly relieved by a four per cent. solution of cocaine. There are also many cases of anterior nasal polypus which do not produce deafness.

One of the chief causes of deafness is the extension of the pharyngeal tonsil into the tuberosity of the Eustachian tube, and even into its ostium. In the so-called ethmoiditis of "Woakes" there is not necessarily any causal connection between the ear and these affections; in many cases the nasal trouble has long existed without involving the ear. If the ethmoid cells become diseased, or necrosed near the Eustachian tube, then we may have paresis of the palate attended with a distressing form of tinnitus, as in one case under our care, there was perforation of the membrana tympani from extension of the irritation through the Eustachian tube. In this case the patient recovered under local and constitutional treatment. The removal of the diseased spicula of bone, or hypertrophied tumors from posterior portions of the turbinated bones, improves the deafness of cases of long standing, when attended with retraction of the membrana tympani, the results of naso-pharyngeal disease. There is an absolute necessity that the pressure of the air—which is fourteen pounds to the square inch—should be equal on both sides of the membrana tympani, and all obstructions to this must be removed to attain perfect hearing. It is of importance that our patients, convalescent from chronic purulent ear disease, should breathe through the nose, and be able to shut the mouth, especially when sleeping, to prevent the drying in the throat and Eustachian tube. This is accomplished by a mouth-band tied behind the ear, as recommended by Delstanche, in the case of children after the removal of the cause. The proper treatment of the naso-pharyngeal disease should always pre-

cede this, in order to see that nothing obstructs the respiration, and to watch the controverting effects of all operations by the use of nasal tents of laminaria, or those of platinum, or glass covered by soft rubber, and thus keep up nasal intubation.

Correspondence.

CORRECTION.

BALTIMORE, May 8th, 1888.

Editor Maryland Medical Journal.

DEAR SIR:—Doubtless, owing to pressure of business during the recent meeting of the Medical and Chirurgical Faculty of Maryland, your reporter has made and published in the issue of your JOURNAL for April 28, 1888, p. 512, such an incorrect abstract of my paper read before that body, that I respectfully submit the following:

Dr. Neale made the report of the Section on Obstetrics and Gynæcology.

He narrated two interesting cases of generally contracted, flattened pelvis, with conjugates of 2½ and 2¾ inches respectively, that occurred in his practice during the past year. One woman was delivered twice by craniotomy with success, the other was delivered by Cæsarean section (Sänger) which resulted fatally to the mother and successfully to the child. The death of this woman was from shock, which probably began before the operation, and was attributed chiefly to delay of the operation and a previous severe high forceps, which was tried with the hope of avoiding Cæsarean section.

This delay and preliminary tampering he believed to be the common and fatal error.

After reviewing the treatment of this class of contracted pelves, he spoke of Cæsarean section *versus* craniotomy on the living child.

Although accepting 2½ inches conjugate as a practically good limit for safe delivery through the natural passages, he doubted the absolute accuracy of pelvimetry in minor degrees of pelvic contraction, especially when applied under the difficulties that may attend during labor. He believed its results were further invalidated by our inability to measure the head of the unborn child, and considered him a bold man, indeed, who, other things being equal, would unhesitatingly cast the beam for life or death of a human child merely by the addition or subtraction of a fourth or even a third of an inch in pelvimetry.

He conclusively proved by actual facts that the interest in the child was not purely impersonal or scientific, as had been alleged.

Craniotomy inevitably sacrificed one half of the lives at stake, Cæsarean section did not!

"*The fear of a fatal result under gastro-hysterotomy, has had much to do with making the result fatal.* But for this the operation would have been more frequently early and elective, instead of late and compulsory."

He cited a number of statistics showing the good results of the improved Cæsarean section and the bad results of craniotomy in contracted pelves.

He thought the limit of 2½ inches conjugate might be extended when the head was abnormally hard or large, or many other conditions obtained which rendered delivery of a living child through the natural passages very dangerous or practically impossible.

He concluded by stating his belief that when the indications for Cæsarean section or craniotomy are present and both operations are practicable, and Cæsarean section or Laparo-elytrotomy offer a fair chance or reasonable prospect of success, if the *uncoerced* consent of the mother be obtained, they should hold precedence over craniotomy, which should then be relegated to its more proper sphere, viz., upon the dead child.

Respectfully,

L. E. NEALE, M.D.

DYSMENORRHŒA in the most violent forms has been relieved by Menière, by giving an enema consisting of bromide of potassium and chloral, thirty grains of each; one-half of this amount to young girls.—*Am. Practitioner.*

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING HELD APRIL 25, 1888.

The President, J. Solis-Cohen, M.D., in the chair.

Dr. Laurence Turnbull read a paper on

TREATMENT OF ACUTE AND CHRONIC PURULENT INFLAMMATION OF THE MIDDLE EAR (OTORRHŒA).*

DISCUSSION.

Dr. Randall: I have been surprised to hear absolutely no mention in the paper of inflation through the Eustachian tube, so extremely valuable an aid to cleansing, blowing out discharges from the tympanic cavity, and aiding greatly in preventing hurtful adhesions which may interfere with the function of the organ. Inflation by the method of Politzer, or of the catheter, or even of Valsalva, will often be followed by immediate and marked improvement; and will advance the restoration of function.

Dr. Turnbull seems to think that where naso-pharyngeal trouble coexists with ear disease, it is secondary; and is due to the escape of pus from the middle ear into the throat. Most pathologists are inclined to take an opposite view; and, so far as my own experience goes, the trouble in the respiratory passage has been generally of older date. Its nature, in most cases (*e. g.*, deviation of the septum), as well as the history, excludes the possibility of its being secondary to ear disease, or the later having had any causal influence; and I have seen cases where long-continued discharge of fetid pus through the Eustachian tube, though very nauseating to the patient, had little effect on the naso-pharynx. Further, as pointing to a causation in the opposite direction, is the fact that where there is unilateral aural trouble, the side affected is that of the more obstructed nasal chamber. With the general plan of treatment, as advanced by the lecturer, we can all agree. I should, however, once more lay more stress on inflation, so often neglected by the general practitioner, and yet so valuable a measure. Cleanliness is all important. The general practitioner, will use the syringe, which is good; but not so good, perhaps, as the dry treatment. It permits of the thorough cleansing required, with less danger of damage in unskilled hands, than if absorbent cotton alone is used; it can be repeated as often during the day as the quantity of the discharge may demand; and if the ear is thoroughly dried after it, inflation being practised to remove all fluid from the tympanum, and the boric powder blown in, the treatment leaves little to be desired. I prefer insufflation, in using the boric powder, to the method described by Dr. Turnbull. It is so much more easily done, and can be practised by the patient himself after cleansing by means of a quill or other little tube connected with a mouth-piece. I fully concur with Dr. Turnbull that there is not much danger of obstruction if the packing be properly done; but I must protest against the "ramming home" sometimes done. I have never seen any trouble at the external orifice of the meatus from the insufflation; on the contrary, the powder tends to allay any inflammation of the meatus; nor have I had the experience referred to, of all the powder blowing back into my face. Inflation, of course, is a measure to be practised with care; I would not often entrust a Politzer bag to a patient; but insufflation is a very simple procedure, and may be left to the patient with entire safety.

Dr. Seiss: As a rule, children who breathe through the mouth do so because the nose is so much obstructed that they cannot get sufficient air through it. The forcible occlusion of the mouth by this pad or any other device might, under some circumstances, be very disastrous.

Dr. Turnbull: Dr. Randall is perfectly right in assigning a high value to in-

*See page 21.

flation as a means of treatment in suitable cases, principally of dry catarrh. It often proves very dangerous in unskilled hands, not on account of its effects on circulation, or the local effect of an excessive pressure, but also the blowing back of purulent secretions from the nose into the pharynx might do mischief. Before practising inflation cleanse the nose thoroughly. Teach your patients, especially children, to keep the nose clean. Many children do not know how to blow the nose. Teach them that and it will help to a cure. The discharge of purulent matters from the ear into the pharynx, setting up secondary troubles, is not a matters of theory with me, but is the result of experience. A very distressing case of bilateral perforation came under my notice in which hæmoptysis and gastric hemorrhage had been diagnosticated from the vomiting of bloody discharges, which had been swallowed. At the post-mortem examination the stomach contained a pint of putrid and bloody matter.

I do not approve of syringing, as a rule, and it should never be done except by the physician. In the first place, a syringe is a rarity, and an expensive rarity. Even if the instrument is good, in proper hands it may tear the membrane. I have seen such accidents.

THE CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD APRIL 6, 1888.

The 208th meeting was called to order by the President Dr. N. G. Keirle in the chair.

The first paper of the evening was read by Dr. W. S. Halstead, on the treatment of

CANCER OF THE BREAST.

He also exhibited a number of instruments and microscopical sections.

Dr. O. J. Coskery, said the Society ought to feel greatly obliged to Dr. Halstead, not only for the valuable suggestions he had made in his paper, but also for the careful way in which he had prepared his specimens for illustration. He thinks we would infer from the doctor's remarks that the Pectoralis Major is always involved in the cancerous growth, but it is not so. The suggestion to take away a large amount of skin when operating is advisable, though he does not think it is the rule to do so. The cause of recurrence of cancer is put down to the fact that all of the growth had not been removed by the operator. He thinks probably that the irritation produced by the incision may be a cause, as the growth frequently recurs in the scar. This recurrence, then, starts in the skin and not in the Pectoralis Major. Consequently the surgeon should not be blamed for leaving some of the growth behind when recurrence here does take place.

Dr. N. G. Keirle said that he could give an example of the early involvement of the Pectoralis Major. In one instance the tumor was small, but the nipple had retracted due to the Pectoralis Major being adherent to it. The cause of this retraction of the nipple varies—an abscess can produce it by the position which the pus may assume.

Dr. W. S. Halstead, said that he did not think that he had said anything to convey the impression to any one that the Pectoralis Major is always involved in the growth of cancer. In small growths it is thought not to be so, though an examination does often find it to be involved. It is impossible to see it with the naked eye. He does not agree with Dr. Coskery that cancer will recur if no germs are left. The incision of the old operation leaves an amount of redundant tissue which can be utilized in making the flap which he recommends. In reply to a question whether the removal of the Pectoralis Major impaired the use of the affected side or not? he said, the two cases, of which he had a history since operation, could go through all of the motions belonging to the part, but they were not so strong as they were before the muscle was removed.

Dr. F. C. Bressler read the next paper on

ABSCESS OF THE CEREBELLUM FOLLOWING SUPPURATIVE OTITIS MEDIA.

Dr. Hiram Woods said that he is situated so as to see a good deal of this kind of affections. He does not believe that any surgical aid would have done good in this case. Chronic suppurative otitis may exist with abscess for a long time without giving rise to any trouble. Roosa says, they occur more frequently in the cerebrum than elsewhere. In the cerebellum they are very rare. The course of treatment for these affections which he has adopted for some time corresponds pretty closely to that laid down by Roosa in his book. First recognize that the trouble in the middle ear may give rise to mastoid inflammation. If such seems to be the case put on six leeches and if this does not relieve in twenty-four hours, then make Wile's incision, put in a tent and in many cases the trouble will stop there. If not the whole bone should be examined with a probe and if any pus is present it will be evacuated by touching the soft points. If this does not relieve the mastoid should be opened, providing there is no evidence of brain disease. Peri-auricular inflammation may sometimes be mistaken for abscess. He had a case of this kind a few days ago. Leeches were applied and he thought the trouble would subside, but it did not. The patient was then chloroformed, and Wile's incision made, but it did not relieve the condition. Pain became very intense and large doses of opium were required to alleviate it. His trouble is probably a periostitis. He has no faith in iodoform in these troubles. It has little effect in discharges from the ear. Absolute cleanliness is necessary. If the symptoms point to mastoid trouble we should lose no time in cutting down on it and if pus is present let it out.

Dr. Geo. J. Preston said that this case of Dr. Bressler corresponded very closely with similar ones that have been described. When the middle lobe of the cerebellum is affected it is a different thing and the result is a permanent lesion. All of these cases are interesting from a surgical point of view. While they are not so favorable for operation as affections of the cerebrum, yet they offer some grounds for hope.

Dr. Hiram Woods in reply to a question said he preferred boracic acid to all other remedies in ear discharges. There are some cases, though, in which it will do very little good, especially if the perforation is small, because it is difficult to apply it to the surface. If the opening is large we can use an insufflator. Alcohol and boracic acid are the best remedies for suppurating ears.

Dr. J. C. Hemmeter called attention to two cases of suppurative otitis recently published, neither of which gave any decided symptoms of its presence.

Dr. J. H. Branham said it was hard to explain the symptoms of paralysis in Dr. Bressler's case. He had once treated a case that came to the City Hospital with symptons of meningitis. The patient had ear trouble and he was relieved by being bled rather freely.

Dr. F. C. Bressler said that it probably would have been hazardous to have opperated in his case, but with such symptoms there was a possibility of its doing good. The post mortem showed, too, that had they trephined it would have struck exactly the seat of trouble. In regard to the literature on the subject he admitted that he had not fully looked it up and that was the reason he did not know of the reported cases referred to by Dr. Hemmeter.

Dr. Jas. M. Craighill then read a paper reporting two cases of

PLACENTA PRÆVIA MARGINALIS.

STATED MEETING, HELD APRIL 20, 1888.

Dr. A. B. Arnold reported a case of

BRAIN DISEASE.

The patient was a girl aged 14 years, who had come under his care at his clinic at the College of Physicians and Surgeons. She had passed safely through all of the diseases of

childhood and enjoyed good health up to ten months before her admission into the hospital. At this time she began to suffer with headache, which continued to grow in violence until she came under his care. An examination showed the girl to be small and delicate in appearance. She was blind in the right eye and nearly so in the left one. This condition has been present for nearly two months. She was intelligent and quiet in temperament. When she would walk a swaying of the body took place. Vomiting occasionally came on without apparent cause. With these symptoms of violent headache, vertigo, vomiting, and swaying gait he made the diagnosis of brain tumor and then gave the case to Dr. Friedenwald to be examined with the ophthalmoscope. As regards the location of the tumor, the vomiting, vertigo &c., would give but little clue to it, but the swaying gait would point to the fact of its being situated at the base of the brain. Still there would be some objection to this for we ought to expect some paralysis, though there was none whatever. The headache, also, induced him to suspect that the base was affected. Frequently in children these brain troubles are tubercular in nature and this was so suspected. After being under treatment for six weeks she was taken with coma and died.

Dr. A. Friedenwald spoke of the ophthalmoscopic examination. There was no disturbance of motility. She was blind in one eye and nearly so in the other. There was atrophy of the optic nerves and the question arose was it primary or secondary? He was disposed to exclude the choked disc because of the dilated and distorted condition of the blood-vessels that was present. He, therefore, concluded that the affection was one of primary atrophy superinduced by pressure.

Dr. J. W. Chambers did the post-mortem examination. The autopsy was done fifteen hours after death. Nutrition fairly good. All of the organs, except the brain, were healthy beyond a few nodules found in the apex of the left lung which proved to be remains of catarrhal pneumonia. There was no evidence of meningitis. At the base of the brain a cystic formation was found which extended backwards and it contained about four ounces of fluid. After removing the brain from the skull, section was made and it was found that the growth was pressing upon the velum interpositum and also encroaching on the chiasm and optic tracts. It was cystic in character and would probably be classed as a psammoma. Whether it was an encysted hydrocephalus is hard to say. Why it did not cause general paralysis is very hard to explain—probably its cystic nature was the reason, as a solid tumor would have been more apt to have done so. The microscope showed around the sheath of the vessels a good many cells, which were probably lymph cells, though some who saw them thought they represented a degree of inflammation.

In reply to a question from Dr. Woods. Dr. Arnold said there was no history of any injury to be gotten from his patient.

Dr. Hiram Woods said about two years ago at the Presbyterian Eye and Ear Hospital, a girl aged six years was brought there to be treated for blindness, Her history showed that in December previous while playing she received a fall and struck the back part of her head. This produced convulsions, but she recovered in four or five days from them. After this her eye-sight became defective and the ophthalmoscope showed atrophy of both optic nerves. An unfavorable prognosis was accordingly given. She then went to several different physicians and they all gave the same opinion. She subsequently lived for about one year and became totally blind. Convulsions again returned and she finally died. No autopsy could be had. The probable diagnosis was a tumor at the base of the brain. He also had seen a case in the practice of Dr. Caleb Winslow after the patient had recovered from measles. The eyes had failed to some extent and the optic nerves were found beginning atrophy. There was, also, present some injection of the retinal vessels.

Dr. A. B. Arnold said in these cases blindness is a common symptom. Any

brain tumor at the base will cause effusion by pressing on the surrounding parts. Sometimes they are latent and then cause no trouble. Again violent headache may be the only symptom pointing to its location. General symptoms of optic neuritis will cause such evidence of choked disc. Tumors which interfere by pressure on certain parts of the brain will give rise to symptoms of location. There was no motor disturbance in this case because there was no interference with the motor trank. When the growth is slow the parts accommodate themselves to it. The situation of this tumor explains as many of the symptoms as can be possible.

Dr. W. P. Chunn read a paper on rare forms of

ABDOMINAL TUMORS IN THE NEGRO RACE.

Dr. Whitfield Winsey said that in 1881 a case came under his notice in which there was a history of ovarian cyst. The patient was a colored woman, aged 45 years. He coufirmed the diagnosis by drawing off some fluid with a hypodermic syringe in which the microscope showed the pressure of cells. The late Dr. Erich saw the case with him and unhesitatingly agreed with him in pronouncing it an ovarian cyst. She died before an operation wasperformed. Tobase a diagnosis on the fact of a certain class of tumors being rare in a certain race is unscientific to say the least. The patient should have the advantage of all of the modes advanced by science in reaching a conclusion. He thinks the paper of Dr. Chunn is valuable in as much as it draws our attention to this important point.

Dr. R. M. Hall said that while he had had a good deal of experience in treating diseases in colored women, he had never been able to detect an ovarian tumor. While he was attending college, a colored woman was brought before the class with a tumor which was diagnosticated as ovarian, but when the operation was performed it turned out to be a fibroid of the uterus.

Dr. W. P. Chunn said that he was glad to know that those of experience agreed with him on this subject. It seems strange that something has never been written about it before. He tried to find some literature referring to the matter, but was unable to do so. There is no doubt that if the subject is more investigated more cases will come to light and thus make the diagnosis easier. It is a subject of much interest and importance.

W. J. JONES, M. D.,
Secretary.

BOOKS AND PAMPHLETS RECEIVED.

The Physician's Leisure Library, No. 7. The Modern Treatment of Pleurisy and Pneumonia, by G. M. GARLAND, M.D., Instructor in Clinical Medicine, Harvard Medical School, etc. Detroit, Michigan: George S. Davis, 1888. Price 25 cents.

A Guide to the Practical Examinatiou of Urine for the Use of Physicians and Students, by JAMES TYSON, M.D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, etc. Sixth edition. Revised and corrected, with a colored plate and wood engravings. Philadelphia: P. Blakiston, Son & Co., 1888. For sale by Cushings and Bailey, Baltimore. Price $1.50.

A Mannal of Diseases of the Nervous System, by W. R. GOWERS, M.D., F.R.C.P., Assistant Professor of Clinical Medicine in University College, London, etc. American edition, issued under the surpervision of the Author, and containing all the Material of the Two-volume English edition, with some additions and revisions. With three hundred and forty-one illustrations. Philadelphia: P. Blakiston, Son, & Co., 1888. Pp. xx–25 to 1357. Price, $6.50.

The Three Ethical Codes: the Code of Ethics of the American Medical Association, with its Constitution and By-Laws, the Code of Ethics of the American Institute of Homœopathy and the Code of Ethics of the National Eclectic Medical Society. The Illustrated Medical Journal Co., Detroit, Mich.

Memoranda on Poisons, by THOMAS HAWKES TANNER, M.D., F.L.S. Sixth American from the last London edition. Revised by Henry Leffman, M.D. P. Blakiston, Son, & Co., 1888. Pp. viii–9 to 177. Price 75 cents.

The Surgical Diseases of the Genito-Urinary Organs Including Syphilis, by E. L. Keyes, A.M., M.D., Professor of Genito-Urinary Surgery, Syphilography and Dermatology in Bellevue Hospital Medical College, etc. A revision of Van Buren and Keyes' text book upon the same subject. New York: D. Apple & Co., 1888.

The Efficacy of Coca Erythroxylon, Notes and Comments, by Prominent Physicians; Mariani & Co. Paris and New York, 1888.

Accidents and Emergencies. A Manual of the Treatment of Surgical and other Injuries in the Absence of a Physician. By CHAS. W. DULLES, M.D., Surgeon to the Out-door Department of the Hospital of the University of Pennsylvania, etc. Third edition, revised and enlarged, with new illustrations. 8vo, pp. viii–123. Philadelphia: P. Blakiston, Son & Co., 1888. For sale by Cushings & Bailey Baltimore. Price 75 cents.

Pneumonia: Its Mortality and Treatment, by HENRY HARTSHORNE, M.D. Reprinted from the Transactions of the College of Physicians, Philadelphia, February 1, 1888.

The Pathology of Hay Fever, by S. S. BISHOP. M.D., Surgeon to the Illinois Charitable Eye and Ear Infirmary of Chicago, etc. Reprinted from the *Journal of American Medical Association*, March 17, 1888.

The Language of Medicine. A Manual giving the origin, etymology, pronunciation, and meaning of the Technical Terms found in Medical Literature, by F. R. Campbell, A. M., M.D., Professor of Materia Medica and Therapeutics, Medical Department of Niagara University. New York: D. Appleton & Co., 1888, pp. 318. Price $3.00.

The Physiological Action of Medicine, by LOUIS STARR, M.D., JAMER B. WALKER, M.D., and W. M. POWELL, M.D. Third edition. Philadelphia: P. Blakiston, Son & Co., 1888. For sale by Cushings and Baily, Baltimore.

THE EFFECT OF COOKING UPON STARCH.—In a graduation dissertation for the degree of M.D. in the Military Medical Academy of St. Petersburg, Dr. N. Butiagin gives an account of some experiments he has been carrying out with the view of determining the effect of cooking on the digestibility of starchy foods. He found that the activity of the saliva does not differ much amongst healthy persons, but that when people are badly nourished and weak, and especially when in addition to this they are suffering from disease of any kind, their saliva has a very perceptibly diminished power of dissolving starch. When starchy substances are subjected to prolonged cooking they become more easily digestible, and in this way compensation can be provided for the inactivity of the saliva of weakly persons. Thus, rice and peas were found to require three hours' cooking in order to render them as easily digested in the saliva of a badly nourished, nervous, hysterical women (which had previously been found to possess only 88 per cent. of the normal activity), as they were with a single hour's cooking by the saliva of healthy persons; and generally it was found that in the case of weakly or diseased persons starchy food must be cooked twice or thrice as long as in the case of healthy persons in order that it might be equally acted upon. Again, when starch has been cooked for a long time there is less difference between the effect of healthy and unhealthy saliva upon it; this is specially remarkable in the case of millet—which, after one hour's cooking, showed a difference of 12.39 per cent. in favor of the saliva of healthy as against that of diseased persons, but after three hours' cooking a difference of 5.77 per cent. only.—*Lancet*, March 31, 1888.

THE TREATMENT OF TONSILLITIS BY SALICYLATE OF SODIUM.—Dr. A. Hillaby writes in the *London Practitioner* for April, 1888, that with the desirability of having some really reliable remedy for tonsillitis and the fact that this disease bears some not distant relationship to acute rheumatism, has led him to try the salicylate of sodium in every case during the past four years. The action of the drug has come up to his best expectations; the fever which in some cases reached 103° was speedily reduced, the action of the skin promoted, the resolution of the inflammation in the throat hastened and the formation of tonsillar abscess averted.

His plan of treatment is as follows:

Open the bowels freely with a good dose of Mistura Sennæ Co., put the patient on milk diet and administer the following draught.

℞. Sodii Salicylatis, gr. x–xv.
Tincturæ aurantii corticis, ♏x.
Aqu., ad. ℥i. M.

To be taken every four hours.

When the inflammation in the throat begins to subside, the dose of the salicylate of sodium is reduced and is given in smaller doses for a few days after all throat symptoms have disappeared.

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BALTIMORE, MAY 12TH, 1888.

Editorial.

THE RELATION OF THE DISEASES OF KIDNEY TO DISEASE OF THE HEART.—In "The Middleton Goldsmith Lecture," delivered before the New York Pathological Society, April 18th, 1888, Dr. J. M. DaCosta, the lecturer, selected as his topic the subject announced above, the clinical and pathological importance of which be clearly recognized. The relation between kidney diseases and heart diseases has been greatly misunderstood and we must acknowledge our indebtedness to the learned lecturer for the very clear manner in which he has stated the fundamental facts concerning these maladies. The general impression has been that heart disease has been a potent factor in the causation of kidney disease. Dr. DaCosta has shown the error of this belief by his own clinical experience. Of 127 cases of valvular heart affection observed by him, in all of which the urine was repeatedly examined and in many of which autopsies were recorded, there were in 92, no evidence of kidney affection, as shown by the absence of casts, of albumen, and, in a number of instances, by the notes of the post-mortem changes. A strict analysis of the 35 cases in which symptoms of kidney disease were recorded shows only 8 cases in which any true affection of the kidney existed—anything more than mere congestion. Among these eight cases, there is not one instance of the contracted or cirrhotic kidney. "In truth," says Dr, DaCosta "the kidney disorder that results from a valvular disease of the heart is simply a congested kidney of full size, redder, a little more glistening, and in elderly people, or where congestion has been of long standing, firmer than normal, showing even slight increase of fibroid texture, and, perhaps a rather more adherent capsule." The analysis of these cases gives proof how rarely valvular disease of the heart leads to chronic disease of the kidneys, other than congestion. Dr. DaCosta takes cognizance of the fact that his experience is at variance with that of Delafield who, in 137 cases of death from heart disease, reports 27 large white kidneys, 29 atrophied kidneys, and 28 of chronic nephritis which could not be classed with the first two. He thinks the apparent discrepancy is to be explained by the cases being heart disease of which it was not specifically known whether it preceded the renal affection or followed it. The difficulty of determining a simple congestive condition of the kidneys, or a real Bright's disease, as a result of the heart malady, Dr. DaCosta fully recognizes. The most common form of valvular disease associated with the renal disorder of the kinds found to exist, was observed to be mitral narrowing; next was mitral regurgitation. In uncomplicated aortic disease albumen and casts are seldom detected. Pure hypertrophy and pure dilation, enlargement without valve affection give the same form of kidney derangement above described. Except in extreme dilation albuminous urine is seldom found.

After studying the influence of heart disease upon the kidneys, Dr. DaCosta reverses the subject and examines the valvular diseases of the heart as they are found associated with affections of the kidney. Of a total of 101 cases of renal disease, 57 of which were acute Bright's disease and 44 chronic, in 41, concurrent

valvular heart affection was observed. Of these 41 cases 29 were chronic and 12 of the acute type. Of the 29 chronic cases it is noticed that 13 have a preceding history of rheumatism and of the 12 acute cases only 3 have the record that rheumatism did not precede. From a fuller analysis of these cases than we have attempted, Dr. DaCosta observes that the character of the kidney affection, in combination with the valvular lesion in the heart, is in the vast majority of instances the contracted kidney. Next stands acute Bright's disease, but without hypertrophy so common in the first group. In the acute, the strong influence rheumatism exerts is evident; nor is that influence lost in the chronic. The most frequent valve lesion was thickening of the mitral and next aortic narrowing or aortic regurgitation. Hypertrophy forming a part of Bright's disease precedes the valve lesion and gives rise to the valvular imperfection. The ordinary valvular affections in Bright's diseases are the result of the altered tissue nutrition of the valves and the degenerative changes which take place there, favored by the morbid products which, from want of proper elimination, circulate in the blood; but these cases of valvular disease of the heart, existing as a complication of Bright's disease, Dr. DaCosta, thinks are overestimated rather than underated. Hypertrophy of the heart, he assumes as positive, does not occur in acute Bright's disease, though the rule in the chronic form. Taking the statistics of Goodheart, Dr. DaCosta shows the great frequency of hypertrophy in cases of granular kidney and the predominance of dilatation in chronic parenchymatous nephritis.

Of all the heart affections associated with kidney diseases, hypertrophy is the most common. Dr. DaCosta attempts in some detail to explain the cause of this condition and offers a new theory to this effect, that hypertrophy as well as other vascular changes are the result of a common process which takes its origin in the ganglionic nervous system. In a series of cases observed by Dr. Longstreth and himself, marked changes were found in the ganglia of the sympathetic nerve from which the cardiac nerves are derived. He argues that the original starting point of the alteration of the heart muscle and vessels is in the nervous ganglia and in the parts of the nervous system controlling the nutrition of these textures. These views lead him to look for the primary changes away from the kidneys and not in them, and to assume that there is a general disease, based on a widespread cause, underlying the vascular alteration, heart hypertrophy, and kidney disease. The conclusion then is reached that the cardiac hypertrophy found in Bright's disease is not in any sense a consequence of that disease, but an integral part of the same general morbid process, of which the kidney lesion is only the most obvious expression. The bearing of these views upon the treatment of kidney disease is not at first sight apparent, but should the malady be shown to be a general rather than a local one general change of the present methods of therapeutics in kidney diseases will be in order.

Bright's Disease and the Ophthalmoscope.—Specialism has so far separated the different branches of medicine, that adepts in one part are not usually very skillful in another. In the diagnosis of the various forms of Bright's disease so much stress is laid on the importance of a urinary analysis to detect albumen and casts and other morbid ingredients of the urine, that the average physician is apt to forget the necessity of looking for signs of this trouble elsewhere. It is extremely important to note the condition of the retina, for early changes may be seen here when the kidneys have shown no sign of disease. Unfortunately few general practitioners can use the ophthalmoscope with sufficient certainty to decide with satisfaction to themselves what the condition of the retina is and what is the difference between a normal and abnormal retina.

Some writers say that it is impossible from an ophthalmoscopic examination to distinguish between the early stages of nephritic retinitis and the first stages of other forms of inflammation of the retina. However true this may be, it should not deter from making an ophthalmoscopical examination in doubtful cases as an aid to diagnosis, and for this reason it behooves the general practitioner to make himself familiar with the use of the ophthalmoscope, however ignorant he may be of the specialties outside of his own.

Miscellany.

Salicylate of Mercury in Syphilis.—Dr. Aranjo, of Rio de Janeiro, gives the following resumé of his use of the salicylate of mercury in the *Bulletin de Thérap.*, Feb. 29, 1888:

1. Salicylate of mercury is well borne by the stomach. The gastralgias, enteralgias and diarrhœas, which are produced by the other preparations, not excepting the protiodide, do not occur when this preparation is used.

2. In the dose indicated (25 milligrams), stomatitis is never produced.

3. Its internal use acts more promptly and more energetically than other preparations of the same base.

4. Externally, it presents the great advantages of causing rapid cicatrization of mucous patches and all ulcerative processes. It furthermore causes re-absorption of non-ulcerating syphilomata (papules, tubercles, gummata).

5. In parasitic dermatoses (eczema marginatum of Hebra, circinate pityriasis of Vidal, parasitic sycosis, pityriasis versicolor, tinea favosa and tinea tonsurans) the salicylate of mercury offers the advantages over other preparations of being without odor and non-irritant when the strength is proporate to the nature of the affection.

6. The salicylate is efficacious in the most invetrate forms of syphilis, and the author believes it will soon replace the protoiodide, the bichloride and the tannate.

7. In the treatment of lepra, it has given very encouraging results associated with gynocardic acid (active principle of the oil of *gynocardia odorata* or chaulmoogra).

8. It has given excellent results in acute and chronic blenorrhagia.

The author knows many colleagues in Rio who have also used this prepation, and speak well of it.

A Steep Bill.—Dr. Chas. E. Simmons, a New York physician, has brought suit for $143,000 against the executors of the estate of the late Hon. Samuel J. Tilden to recover pay for his services as Mr. Tilden's physician. The case has not advanced far as yet. In the complaint only the lump sum, without particulars, is given. The executors ask for a bill of particulars, and their lawyers appeared in court Monday and moved that such a bill be ordered. Argument on the motion was adjourned until to-day. The New York Morning Journal quotes a man of figures as saying: "Dr. Simmons must have visited Tilden every day at $100 a visit for four years, giving him the benefit of a leap year every twelve months; or he visited him every day at $50 a visit for eight years; or at $20 a visit every day foe twenty years; or at $10 a visit every day forty years; or at $5 a visit every day for eighty years; or at $2 a visit every day for two hundred years." But how old is Dr. Simmons?—*Baltimore Sun*, May 1, 1888.

A Remarkable Case of Heredity.—A correspondent writes that a hydrocephalic child was born to an ultra-prohibitionist father, who said to the doctor, "What is the matter with my child?" "Why, it has inherited its disease from you." "What do you mean?" "Why, it has *water on the brain.*" The father was informed that the child's prospect of recovery was about the same as that of his (the father's) succeeding in his undertaking.—*N. Y. Med. Journal.*

Radical Cure of Fistula in Ano.—First trace of fistula with flexible probe. Wash out the track with a 5 per cent.

solution of "hydrogen peroxide." Then inject a 95 per cent. solution of carbolic acid, plus an equal quantity of a 10 per cent. solution of muriate of cocaine. Draw about 10 to 15 minims in the syringe. Push the flexible needle to the depth of the fistula, then inject slowly as you withdraw the needle. Within two hours inject oleum eucalyptus and glycerine, equal parts, and the operation is finished. Keep the patient quiet for forty-eight hours.—*Technics.*

Physical Training of the Greeks and Romans.—Mr. A. S. Murray, Keeper of Greek and Roman Antiquities British Museum, delivered an interesting lecture at the Parkes Museum on Thursday, March 22nd, on the "Physical Training of the Greeks and Romans." He observed that it had been said in ancient times that the two things which the Greeks desired most were to be healthy and to be beautiful. Beauty in their eyes was attainable largely by a careful system of physical training. We see, he observes, their idea of physical beauty nowhere better than on the sculptured frieze of the Parthenon at Athens, now in the British Museum, for the greater part of it is a simple glorification of the beauty of youth as developed by physical training on horseback and in chariot racing. There was no more marked difference between the Greeks and the semi-barbarous races that surrounded them than in this matter of physical training. In one of his dialogues Lucian introduces the Scythian Prince, Anacharsis, who visited Athens in the sixth century B.C., and in the course of his visit went to the Palaistra. He was much surprised at the various exercises of the youth, thinking them ridiculous. He asked Solon, the legislator, how he could defend such folly. Solon explained that the exercise of the youth might seem absurd to an onlooker, but that they were meant to train up a race of men who, largely by this training, should become valuable citizens, capable of taking their part in war through the skill of body they had thus acquired, and capable of taking a share in the administration of public affairs through the clearness of head and ready judgment, which the habitual training of the Palaistra fostered in them. The lecturer then proceeded to describe the ordinary exercises of boys previous to their reaching the age of joining the Palaistra; and, secondly, the series of athletic contests which they practised in the Palaistra, giving instances of the skill attained in the various contests of leaping, running, wresting, boxing, throwing the disc and the spear. Lastly, he noticed the physical training of girls, to whom running was the only form of public contest allowed, and that only in a very restricted degree. He concluded with a brief sketch of a limited range of physical exercises, as practised by the Romans.—*Brit. Med. Journal.*

Formulæ for the Use of Digitalis.—Huchard, in the *Revue Gén. de Clin. et de Thér.* of March 22, 1888, gives the following formulæ:

Digitalis with bromides:

Tinct. digital.	♏30.
Potass. bromid.	ʒ 5.
Aquæ destill.	ʒ 9½.

Dose, one to three tablespoonsful daily.

Digitalis and trinitrine:

Tr. digital.	♏45.
Alcoholic solution of trinitrine 1 to 100	gtt. 30.
Aquæ destill.	ʒ 9½.

Dose, from two to six teaspoonsful daily.

Digitalis and iodide of sodium:

Sodii iodid.	ʒ 1.
Digital. pulv.	gr. 30.
Glycerin.	q. s.— M.

Ft. pil. 40 in num.

Sig.—Three or four pills daily, for five or six days.—*Med. News.*

Remedy for Myalgia.—An old and well-known formula combined with lanoline had such a quick and favorable effect in myalgia of the scapular and brachial regions, that I feel safe in offering it to the profession. ℞.—Hydrate chloral, gum camphor, āā ʒ ss. Mix well, until liquid, and add lanoline, ʒ j.

M. S.—Rub well over painful parts. To show what lanoline can do, it fully relieved the pain in six hours, and had the constitutional effects of chloral as fully as if the person had taken gr. xx.–xxx. per mouth Only two applications were used, and only a limited portion of the salve.—*Med. Rec.*

Sulphonal, A New Hypnotic.—This substance is "diethylsulphondimethylmethan," an oxidation product of the union of ethyl-mercaptan with acetone, and has, therefore, the composition represented by the formula $(CH_3)_2=(C_2H_5So_2)_2$. We owe its discovery to Professor E. Baumann, of Freiburg, and its therapeutical application, or, rather, some knowledge of its remarkable physiological properties to Professor A. Kast, of Freiburg, who has a long article on the subject in the current issue of the *Berliner Klinische Wochenschrift* (April 16th, 1888), in which he has nothing but praise for this new addition to the materia medica. The term "sulphonal" is due to a happy suggestion of Herren Fr. Bayer and Co., Elberfeld, who supply it. This substance crystallises in large colourless tablets, and is perfectly devoid of taste and smell. It dissolves in 18 or 20 parts of boiling water, in 100 parts of water at the ordinary temperature, and is easily soluble in alcohol or alcoholic ether. It is not affected by acids or alkalies, or by oxydising agents either in the cold or warm. Thus, concentrated sulphuric acid with heat scarcely affects it, and it resists fuming nitric acid, and even chlorine and bromine; it is, therefore, a very stable body. Twenty experiments with sulphonal on healthy men showed that doses of three or four grammes were borne by adults without the least discomfort or disagreeable after-effect. Thus, a medical man, aged 28, took 3 grammes (46 grains) at 4 p. m., and at 6:15 p. m. began to feel sleepy, with a feeling of heaviness in the head. At 6:15 these feelings lessened, but at 8:15 they increased somewhat. At 9:15 the subject of experiment went out for the evening, having resisted the inclination to sleep. He passed a tranquil night afterwards, and felt no after-effects of any kind. Another medical colleague sank into a sound sleep lasting several hours. The time of day and the meals were found to influence the action of sulphonal very much.

Employed medically the drug has been given to 60 patients, and 300 observations of its effects were made (Professor Cramer gave it 200 times in the Marburg Lunatic Asylum). The results, almost without exception, were that the patients sank within from half an hour to two hours into a tranquil and sound sleep, lasting from five to eight hours, and awoke feeling perfectly comfortable. A few felt tired and sleepy next day. The digestion, pulse, and temperature were unaffected, and it is curious that no ataxy of any degree or kind was present, whereas this was the most prominent symptom in dogs after large doses. The ordinary dose for man is two grammes (half a drachm). Professor Kries has examined the effect of sulphonal on the blood-pressure, and has established the fact that in dogs, even after very large doses, the blood-pressure is not lowered. Poisonous doses in dogs, to determine the mode of death, caused severe convulsions, then, after a few hours, a heavy sleep, deepening to coma and ending in death in about ten hours. Spectroscopic and microscopic examination of the blood revealed no alteration of its elements. Sulphonal appeared most efficacious in cases of sleeplessness in nervous subjects, but was given with benefit in all kinds of cases, including even cardiac valvular disease. —*British Medical Journal*, April 21, 1888.

Saccharine in Diabetes.—M. Worms reports to the Paris Academy of Medicine that saccharine, given to four diabetic patients, caused in three of them dyspeptic troubles, such as a sensation of epigastric weight, loss of weight, etc., so that he feels that there is a certain amount of risk in giving this new and unknown substance to such patients. The dose used was a grain and a half. Both M. Dujardin-Beaumetz and M. Constantin Paul stated, however, that,

using it mixed with a sodium salt forming a saccharate of sodium, they had not noticed any such troubles.—*N. Y. Med. Journal.*

A New Hypnotic.—Boldin the glucoside contained in the bolda-leaves is a new hypnotic recently introduced by the French. According to Dr. Juranville it far surpasses opium, chloral and other such agents. It is easy to take, has no unpleasant after effects, increases the appetite and at the same time strengthens the patient. Doses of from 5 to 10 grams were given daily to different patients without injury. Sleep is natural and the breathing is regular and quiet. Excited, hysterical and nervous people who had suffered for a long time with sleeplessness sank into a refreshing sleep after taking a dose of this drug. Boldin is given in capsules, each one containing one-filth of a gram, or as a hypodermic injection one-half a gram in 10 grams of water—*Deutsche Med. Wochenschrift*, April 19, 188.

Syphilides of the Vulva.—

℞		
Chloral Hydrate,	5	grams.
Tinct. Eucalypti	10	"
Aq. Destilat	500	"

To apply to mucous patches and ulcerating syphilides of the vulva and other parts.—*Jour. of Cut. and Genito-Urinary Diseases.*

Benzoate of Sodium in Acute Follicular Tonsillitis.—L. C. Boisliniere, Jr., in a communication to the *St. Louis Courier of Medicine*, February, 1888, says that in an upward of one hundred cases of acute follicular tonsillitis, the following formula has been used:

Sodii benzoat, . . .	ʒi-iv.
Glycerini, . . .	
Elix. calisayæ, . .	āā fʒj.

M.

Sig.—One teaspoonful every one or two hours.

In the analysis of the last seventy-five cases, he finds that: 1. By the use of benzoate of sodium the disease is cured in from twelve to thirty-six hours, a great gain in time, as the average duration of the disease has been heretofore from two to five days. The average duration for the seventy-five cases was twenty hours. In private practice, when the cases could be watched more carefully, the white, cheesy, points have been frequently seen to disappear in from eight to ten hours. 2. The benzoate of sodium undoubtedly controls the febrile elements in the disease. 3. It may be given with impunity, even to children; he has never been able to discover any bad or even disagreeable effects from its action. 4. It is a valuable addition to the remedies used in throat affections, especially in an acute inflammatory condition of the tonsils, when applications only aggravate, and gargles increase the trouble.

Vaginitis.—Vidal has found the balsam of Gurjun one of the best substances in treating vaginitis. Tampons soaked in a mixture of two parts of lime-water and one of the balsam are introduced within the vagina. Some irritation and burning sensations are at first experienced, but soon disappear. In gonorrhœa Dr. Vidal employs the balsam of Gurjun internally as well.

The following formula is applicable to certain cases of dry eczema giving rise to excessive itching:

℞		
Glycerole of starch	30	grams.
Tannin		
Calomel	āā 1	gram.

The glycerine must be very pure or the preparation will be irritating.—*Jour. de Medicine.*

Tonsillitis.—Let the patient wet his forefinger and dip it into powdered bicarbonate of sodium. The surface of the tonsil should be rubbed with the end of his finger every five minutes during half an hour, afterwards every hour during the same day. Three applications a day are then sufficient. The author since adopting this treatment has not had to lance a single inflamed tonsil.—*Lyon Medical.*

Medical Items.

Dr. Wm. J. Cole died at his residence 1124 Cathedral Street, Sunday, May 6, aged 35 years.

Rohé uses a 1 in 10 solution of liquor sodæ chlorinatæ in gonorrhœa. He finds the discharge promptly ceased in the majority of cases.

Mr. Thomas Bryant has retired from his post of Surgeon to Guy's Hospital. He had held this position for thirty-one years.—*Med. Rec.*

Professor Tito Vanzetti, the eminent Italian surgeon of Padua, who died recently, aged 78 years, left $20,000 and a magnificent library to the University of Padua.

The Crania of Mozart, Beethoven, Gluck and Schubert are to be examined by Professors Toldt, Meynert, and Kundrat, and Dr. Weisbach, a Committee of the anthropological Society of Vienna.

Extensive burns are best treated according to *Le Clerc (Jour. de Méd.*, March, 1888), by the continuous bath rendered antiseptic with carbolic acid and kept at a temperature of about 95°.

Dr. Frank Donaldson, Jr., has returned to the city after spending eight months in Germany, principally in Berlin and Bonn. He has had a most profitable visit and brings the latest inside news in regard to the Emperor's illness.

The State Board of Health held a meeting at Health Commissioner Steuart's office recently. A resolution was adopted requesting the president, Dr. Piper, to obtain the opinion of Attorney General Whyle, an ex-officio member of the board, in reference to the act, and to report at a subsequent meeting of the board.

At the meeting of Medical Editorial Association on Monday, May 7th, at the Burnet House, Cincinnati, the following officers were elected: President, Dr. W. C. Wile, Danbury, Ct.; Vice-President, Dr. Dudley A. Reynolds, Louisville; Secretary and Treasurer, J. C. Culbertson, Cincinnati; Censors, Drs. R. J. Dunlinson, Y. H. Bond, and Wm. Davis.

The generous publisher of that most valuable periodical *The Index Medicus* has sent out a circular stating that the *Index* is not self-supporting. It is not too much to ask that every medical society in the country will subscribe for at least one copy. It is unquestionably the most valuable medical periodical published in the world, and is indispensable to a literary worker.

At the meeting of the Maryland Academy of Sciences, held at the residence of Dr. R. T. Wilson, the following officers were elected for 1888-89: President, Prof. P. R. Uhler; Vice-President, Dr. John Morris; Corresponding Secretary, Rev. G. A. Leakin; Recording Sectary, Mr. E. Stabler, Jr.; Treasurer Mr. W. Canby; Librarian, Mr. A. Ressler; Curator of Museum, Prof. G. L. Smith; Executive Committee, Drs. C. Johnston, R. T. Wilson and Mr. A. P. Sharp.

The committe appointed by the Board of Overseers of Harvard to consider the subject of the excesses and abuses in athletic sports at the University submitted a majority and minority report, differring slightly in stringency, and the whole object of which to restrict the abuse of athletic sports to the detriment of education, and at the same time to allow a reasonable amount of healthy exercise in the usual sports.

Creosote injection for gonorrhœa is praised by Turpura Impallomenti, especially in combination with boric acid, etc. He uses a 1 per cent. solution in decoction of camomile. The author says he has seen moving bodies within the pus cells twenty-four hours after the discharge began, and two hours after using the creosote found the microbes dead. Five out of seven patients were cured in six days.—*Farm. Italiano.*

Great are the wonders of the telephone. A physician reports to us that he was saved a two-mile ride through a driving storm the other night by having the patient, a child, brought to the instrument and held there until it coughed. He diagnosed false croup; prescribed two grains of turpeth mineral, and turned in for an undisturbed sleep during the remainder of the night. He found the patient in the morning doing nicely—under the care of another doctor.—*Gaillard's Med. Jour.*

It is a rare thing that one can open a medical journal or even a text-book, without finding some mistakes in the prescriptions. The two most common faults, and the one to which we wish to call particular attention, are the mixing of Latin and English, and the incorrect abbreviations of Latin words. The whole fault lies in this: the writers either do not know the declension of Latin nouns, or they do not know the Latin words for the drugs. It seems to us much more sensible if one is ignorant of Latin to write the prescriptions in plain English. If you do know Latin and want to use it, there is no objection to so doing; but write the *whole* prescription in Latin, and write it correctly. If you desire to cover an uncertainty in regard to the Latin terminations by abbreviations, be sure that you abbreviate correctly; e. g., do not say, "℞ Potass. Acetas," as we not infrequently see, but "℞ Potass. Acetat.," and so for any other nouns with nominative in "as," genitive in "atis." If you know the Latin, and still write it incorrectly, it is even less excusable. We should have some method, however; and what we do, let us do that intelligently and correctly.—*Gaillard's Med. Jour.*

Original Articles.

LECTURES ON THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHÉ, M.D.,

Professor of Dermatology and Hygiene in the College of Physicians and Surgeons, Baltimore.

Lecture V.

TERTIARY SYPHILITIC ERUPTIONS.

In its early stages syphilis presents many of the clinical features which characterise the history of the eruptive fevers. There is a period of incubation, of febrile disturbance, and of eruption on the cutaneous and mucous surfaces, as described in preceding lectures. Then the disease seems to disappear entirely, and the patient's usual condition of health is apparently re-established. In perhaps one-half the cases the end of the eruptive stage marks the termination of the disease. But in the remaining half, after a varying interval, known as the period of latency, a series of lesions appear which present marked differences from those that have gone before. While in the secondary, or eruptive period, the manifestations of the disease are symmetrical, and the disease itself contagious and inoculable both by means of the blood and particular secretions, normal or pathological, and transmissible to the offspring of diseased parents, these characteristics are not present when the disease has passed the secondary period. If the late or tertiary symptoms manifest themselves, they are more distinctly localised, are unsymmetrical, and as a further point of distinction, do not yield readily to the same treatment. Furthermore, in this stage the blood and the products of the lesions are no longer regarded as inoculable by many, while some hold that hereditary transmission of the disease is no longer possible.

It may be stated, however, that many syphilologists of deserved high standing do not regard the last two propositions as incontestably established.

These peculiarities in the clinical history of syphilis have led Hutchinson to express the opinion that the so-called tertiary lesions of syphilis were merely sequelæ, and that at the time of their appearance the syphilis no longer existed in the individual. Hutchinson's view has been adopted by Bäumler, who has written what seems to me to be one of the best treatises on syphilis accessible to English readers.* Previous to Hutchinson, Virchow had already expressed the opinion that the tertiary symptoms of syphilis were due to renewed infection of the blood from local residual depots of syphilitic virus in the body. The English surgeon, however, is disposed to deny any blood-infection after the termination of the secondary or eruptive period. The question cannot yet be regarded as settled. While Hutchinson's views have much plausibility, the evidence in their favor is by no means so direct and definite as he claims, and from a purely clinical standpoint, it will be advisable to consider the tertiary period as still a stage in the development of syphilis. An additional reason for considering this period as a true stage of syphilis, and not as a mere sequela, is that it is really the most grave period of the disease. The early stages of syphilis are not periods of danger to life, but in the gummatous stage, when important internal organs become affected, the disease frequently proves fatal. Hence the period of gummatous lesions of the skin is one of great prognostic importance, for when gummata occur in the skin they are probably also invading internal organs.

The Tubercular Syphilide.

[Synonym: Syphilitic Lupus.]

The tubercular syphilide marks, in a general way the transition from the so-called secondary, to the tertiary or gummatous stage of syphilis. In fact, the syphilitic tubercle is anatomically, practically a gummy tumor of the skin. However, the degree to which the gummatous or specific granulomatous ma-

*Ziemssen's Cyclopedia, Vol. 3.

terial is infiltrated seems less in the tubercular syphilide than in the true gumma.

This lesion is one of the later manifestations of syphilis. It rarely occurs before the third year after infection and may be delayed for five or ten years or perhaps even longer.

The syphilitic tubercle appears in the form of pinkish to brownish-red, or violaceous lesions, varying in size from a split-pea to a bean or larger. The nodules are circumscribed, easily defined against the surrounding skin, and extend through the entire thickness of the integument. They may be flat or project above the surface. They are usually firm to the touch, and the color only partially disappears under pressure with the finger. The tubercular nodules may be single or multiple. In the latter case they are usually aggregated in groups forming small nodular patches. There may be healthy skin between the individual tubercles, or these may be so thickly set together as to give the appearance of a uniformly infiltrated patch. Should the patch increase in size, it seldom does so equally in all directions, but progresses in one direction while retrogressive changes follow.

The evolution and course of this syphilide is essentially chronic. It developes slowly and may last for months without change, simulating various other new formations of the skin such as lupus, leprosy, or cancer.

The tubercular syphilide may occur on any region of the body. It is, however, most frequently found upon the forehead, nose and lips, or at the angles of the mouth. On the trunk the seat of predilection seems to be the scapular region. The extensor surface of the forearm near the elbow is also frequently the seat of the eruption.

The conformation of the tubercular patches is sometimes very remarkable. I have seen one case in which the groups of tubercles were situated about the area of distribution of a branch of one of the thoracic nerves, resembling, on superficial examination, the pigmentations following an eruption of herpes zoster.

Concurrent Symptoms.

Among the manifestations of syphilis which accompany the tubercular eruption are paronychia, lesions of the nervous centres, mucous patches, endarteritis, cachexia, purulent iritis and alopecia. It is rare to find any remains of the initial induration contemporaneous with the tubercular syphilide.

Differential Diagnosis of the Tubercular Syphilide.

The disease with which the tubercular syphilide is most frequently confounded is lupus. In fact the resemblance is often so great that some authors have cut the Gordian knot by describing a syphilitic lupus. This is an equivocal and indefinite expression and should be discountenanced. It is much better to avoid making a diagnosis altogether than to use a term which is vague and meaningless.

By careful attention to the clinical history and appearance the diagnosis between these two affections can usually be made. Lupus nearly always begins before the twentieth year, and in the majority of cases probably before puberty. A tertiary syphilide is unlikely to occur before adult life is reached. Lupus is much slower in its progress than syphilis. The advance of the lupus infiltration is measured by years, that of the tubercular syphilide by weeks or months. Should ulceration occur the destruction by the syphilitic process is much more rapid than by the lupus, the ulcer in the latter disease is more likely to be shallow, with sloping borders and non-infiltrated base. The syphilitic ulcer is deep, with a punched-out appearance and covered with a profuse, offensive secretion, or with dirty-greenish, massive crusts. In lupus the ulcer is generally painless while the contrary is the case with the ulcer of syphilis. Finally, if doubt still exists the aid of antisyphilitic treatment may be invoked to clear up the diagnosis.

Sycosis may sometimes closely resemble a tubercular or gummatous syphilide. In sycosis the inflammatory symptoms

are usually predominant, while they are wanting in the syphilitic growth. In the latter the demarkation between normal and diseased skin is usually clearly defined, while in sycosis or other inflammatory tubercular affections the redness of the skin shades off gradually into the normal color.

The tubercular syphilide may be mistaken for tubercular leprosy in one of the stages of the latter disease. In leprosy, however, the tubercles are likely to be situated about the brows rather than at the margin of the hairy scalp, the lobes of the ears and tip of the nose are also often invaded and superficial ulceration of these spots of infiltration is not uncommon. There is usually anæsthesia of the leprous tubercles and a careful microscopic examination by an expert bacteriologist will discover the *bacillus leprœ*. The thickening of the ulnar nerve and the anæsthesia of the hands will also be aids in the diagnosis.

Some cases of dry, scaling, tubercular syphilide may simulate psoriasis, but the limited extent of the lesions, the character of the scales, and the difference in appearance of the infiltrated base will suffice to distinguish the two affections.

Prognosis of the Tubercular Syphilide.

The prognosis so far as the lesion itself is concerned is favorable. With proper treatment it can usually be cured with comparative rapidity. When it advances to ulceration instead of undergoing resolutive absorption it may produce disfiguring scars, or destroy important structures. It is as an index of the stage of the luetic disease itself, however, that the tubercular syphilide has a prognostic importance. It is in the stage of gummatous formations when important internal organs, brain, liver, kidneys, lungs and heart become affected. Hence the appearance of tubercular or gummatous lesions of the skin is a warning that similar processes are probably going on in the internal organs, and demand prompt and appropriate measures for their arrest.

HEGAR'S SIGN OF PREGNANCY. THE TRUE WAY TO OBTAIN IT. ITS VALUE IN THE DIAGNOSIS OF PREGNANCY, IN CASES OF PLACENTA PRÆVIA AND IN CASES OF SUSPECTED ABORTION.*

BY A. K. BOND, M.D., OF BALTIMORE.

The need of certain signs of early pregnancy is felt by all physicians.

From Hegar, of Freiburg, we have a sign which promises to be very useful.

As far as I know, Hegar has never published anything upon the subject. It was first brought to the attention of the profession by Reinl, an assistant of Hegar, in the *Prager Med. Wochenschrift* of June, 1884. The next we hear of it is in the *Berlin Klin. Wochenschrift* of September, 1885, in an article by P. Compes, who succeeded Reinl as assistant to Hegar. The article in this journal attracted much attention. We have testimony to the value of the sign from G. Kispert, of Madrid, in the *Centralblatt für Gynœcologie* of Dec. 12th, 1885. In America articles upon the subject have been published by E. H. Grandin, (*Med. Record*, N. Y., Feb. 27, 1886) and by Dr. McKee (*Jour. Amer. Med. Asso.*, Nov. 6, 1886). After a careful consideration of the modification which these two gentlemen have made, I am driven to the conclusion that their method does not fairly represent the method of Hegar, and ought not to be brought forward as identical with his.

For a description of this modification I refer my readers to the above-mentioned articles which are within easy reach of all. The sign of Hegar and the proper mode of obtaining it are fully and correctly described only in the original articles by Reinl and Compes.

In order that we may understand Hegar's sign of pregnancy, we must learn Hegar's method of examining by the rectum. In the treatise by Hegar and Kaltenbach on Gynæcology (I quote from the *Cyclopæd. of Obstetrics and*

*Read before the Clinical Society of Maryland, May 4, 1888.

Gynæcology, Wm. Wood & Co., vol. 6, page 42) Hegar says, "The thin yielding wall of the rectum permits us to palpate through it accurately the posterior wall of the uterus, its lateral borders, the entire outline of the fundus, the sacro-uterine and broad ligaments, the ovaries and walls of the pelvis, to a degree which is impossible through the firm, unyielding walls of the vagina. The following is the technique; the finger is slowly passed through the anus, and enters a more or less extensive, flabby-walled sac, which is either empty or filled with fæces. Through this the cervix is felt above and anteriorly as a firm and relatively very large body, which is often mistaken by the beginner for the body of the uterus or some pathological enlargement. Very accurate information may be obtained if the thumb is introduced into the vagina and applied to the portio vaginalis. The sacro-uterine ligaments converge on both sides as curved, elastic strands from the thickness of a raven's quill to that of a pencil, toward the isthmus where they unite, generally as a sort of sharp or rounded comb. The finger may remain below these ligaments in the space below the third sphincter. This, however, is not advisable. The conditions will be recognized clearly and without risk of error if we pass above the folds of the third sphincter. This is occasionally difficult. The opening between the lower and upper portions of the rectum is often narrow and may be situated more to the right or left, often posteriorly. The anterior wall of the rectum, sinks toward the ampulla, so that the lumen, which is thereby narrowed, can be found only close to the sacrum. Sometimes the posterior, or rather the entire wall of the rectum sinks toward the ampulla (somewhat like the first stage of an intussusception), and the lumen must be sought at the tip (directed downward) of this depression. In many cases the way is shown by particles of fæces. The easiest method is to inject about one-fourth liter of water into the rectal ampulla. This distends it, and the opening is then readily found along the smooth internal surface. (By the "third sphincter" he means apparently certain folds of mucous membrane containing muscular tissue which in some cases, when the rectum is empty, project as much as half an inch into its cavity.)

After we have thus entered the upper part of the rectum, the folds of the third sphincter and the sacro-uterine ligaments are pushed down by a slight claw-shaped curvature of the finger, after which it gains free play to the right and left in the wider portion of the gut. Moderate counter-pressure from the abdominal wall generally suffices to bring the posterior wall of the uterus and even all the contours of the organ in contact with the finger and enables us to reach the boundaries of the fundus. Even if the uterus is anteflexed or anteverted it may be made accessible by the external hand after the displacement is rectified. If perchance this cannot be done, moderate traction with the forceps upon the portio-vaginalis will suffice."

So much for the method of examination by the rectum. In regard to the sign of Hegar, Reinl says: "In the course of last winter I had an opportunity at the gynæcological clinic of R. Hegar, of learning a new and very valuable sign of pregnancy in the first months. This consists in the detection of an unusual softness, thinning and yielding condition of the lower uterine segment, that is, of the part immediately above the insertion of the sacro-uterine ligaments.

This condition of the said part is not only perceptible when the rest of the corpus, as not seldom occurs, feels firm and hard, but is also well marked in those cases where this part is soft and elastic.

Even in the latter case, there is always a possibility of compressing the lower uterine segment, of drawing it out to a certain degree with the fingers, and so of making a distinction between it and the part above it, while below, the cylindrical cervix of firmer consistence is felt distinctly coming off from it. The yielding condition and flaccidity of the part may be so great that one may

doubt whether there is any connection at all between the neck and the larger swelling in the abdomen or pelvis. We know at present of nothing which can produce such conditions except pregnancy—certainly not solid tumors—and Hæmatometra and Hydrometra furnish no diagnostic difficulties.

The cause of this diagnostic condition is be sought in this; that the lower uterine segment, as the thinnest part of the whole corpus, must on account of pregnancy become succulent, of looser texture, thinned and extremely elastic, since one may, as is easily shown, shoving the uterus upward, seize this part between the touching and palpating fingers compress it and cause it to become more thin. Failure to find this, however, in no way excludes pregnancy, since it is easy to see that with marked chronic Infarctio Uteri, pregnancy may exist without rendering this condition of the lower uterine segment very evident."

Reinl then gives the record of six cases examined at Hegar's clinic. I quote one as an example:

"Case I.—Age 33 years. Two previous labors. Last period end of October 1883. Examined January 29, 1884. The corpus uteri is the size of a small child's head, and feels remarkably hard. If one examines per anum, and presses with the other hand close behind the symphysis backward and downward, thus driving the neck against the finger which is in the rectum and reaching the upper end of the neck, then he receives an impression as if the neck of the uterus came to an end above and the upper tumor were entirely independent of it.

But he convinces himself soon that there, where the neck ceases, something soft begins; and if he now presses down the tumor the connection becomes at once unmistakable, and he feel plainly that the more solid neck passes over into a soft flabby mass, which in turn, is connected with the harder swelling above.

The soft flabby mass may be compressed and at the same time made thin by the fingers as they approach each other. Diagnosis: Pregnancy in the third month."

From the five other cases I quote one or two passages.

Case II, the mass felt between the fingers seemed "5 or 6 cm. broad and 1 cm. thick, soft in the middle but harder and thicker toward the sides, and spreading out like a fan from the cervix."

Case V. "the lower part of the soft corpus uteri, which before had an antero-posterior diameter of 3 cm., may be so compressed that the fingers feel only a thin membrane." In five of these cases the interval since last menstruation was about two and half months.

Compes, writing 15 months later, says with reference to the article of Reinl, that the study of this subject had been carefully followed up at Hegar's clinic, and a large number of cases could be cited in support of his statements. He says that the subject had received too little attention, because the method of combined abdominal and rectal examination, so important to gynæcologists, was so little known and used by physicians. He says: "After the finger introduced into the rectum has *passed above* the sacro-uterine ligaments, by which the boundary between cervix and lower uterine segment is marked, the hand upon the belly presses slowly from above downward just above the symphysis toward the finger which moves forward from the rectum, and which examines first the cervix, then the lower uterine segment—its centre and afterward its sides—and follows the corpus uteri to its upper segment. Persons who are inexperienced should draw upon the portio vaginalis with the forceps. In all possible stages of pregnancy this compressibility was found, even as early as the seventh week.

Under conditions other than pregnancy, as in various pathological states or especial phases of the sexual life, it was not observed."

The cause of this condition of the lower uterine segment is, he thinks, that while its walls are softened by pregnancy, the contents of the uterus are easily driven by the pressure of the fingers into the upper segment. He would consider it an absolutely certain sign, were it not that in retroversion of the

uterus, in isolated cases, a condition may be found somewhat similar but not nearly so well marked. Once the sign was missed even in pregnancy, but this could be easily ascribed to a pathological condition. All the women were examined without an anæsthetic, and then under anæsthesia the observations were confirmed. Of the seven cases which he describes I shall mention one.

"Case I.—Vaginal portion feels like a hard plug. Behind and above lies an unusually soft, elastic body, the upper part of which lies directly under the promontory. Per anum one can feel very plainly the connection between the soft body and the plug below. Upon compressing the soft body with the fingers just above the neck, one can feel a mass between them 4 or 5 mm. thick. The corpus uteri is as large as a fist. This patient menstruated seven or eight weeks before the examination."

We may believe that these accounts, given at fifteen months interval by two successive assistants of Hegar, represent correctly this new sign brought forward by that eminent gynæcologist. It is hardly necessary to cite in this connection the observations of American physicians, who contented themselves with simply observing, with the finger in the vagina, the consistence and shape of the anterior uterine wall; the changes in which during pregnancy were long ago known to the profession (See for instance, Pajot in the *Gaz. des Hôpitaux*, Feb. 21, 1884).

G. Hispert writes (*Centralblatt f r Gynecologie*, Dec. 12, 1885) "I too could in several cases confirm the trustworthy sign mentioned in Compes' article. It was also detected in uterine hæmorrhage resulting from abortion, if the bleeding continued not more than fourteen days. In a case where the bleeding had lasted three weeks, I could no longer find the compressibility of the lower uterine segment, although the uterus could be very easily reached in bimanual examination. This sign could thus be of value in deciding the question whether a metrorrhagia is the result of abortion or not." He closes with another valuable suggestion. "Would the absence of this sign in the early months of pregnancy be a timely indication of placenta prævia?"

I must now mention two subjects upon which the foregoing observations seem to throw light. One is suggested by Compes in the article already quoted. He says, "I must add one word in regard to the relation in which our discoveries stand to the softness and compressibility of the lower uterine segment described by Martin and Horwitz in hypertrophic elongation of the neck of the uterus during pregnancy. Both authors assert that the change is at times so great that one may be led to believe that what he feels above the neck is an entirely independent tumor. This mistake is naturally favored by the fact that the neck, as a result of its hypertrophy, seems to be a complete uterus. Laparotomy has actually been done in consequence of this mistake. Both authors have considered as pathological that which is physiological, and have viewed as connected with hypertrophy of the neck that softening which always occurs naturally in the pregnant uterus." The other subject is suggested by an article by Dr. Hanfield-Jones (*Edinburgh Medical Journal*, March, 1888). Under the title "An Unusual Condition of the Uterus in the Early Months of Pregnancy," he relates a number of cases in which the pregnant uterus rolled at times in the abdomen under the examining hand as if it were a fibroid mass connected with the pelvic organs by a long pedicle.

These seem to have been cases in which the normal changes upon which Hegar's sign depend were unduly exaggerated.

I offer this paper in the hope that it may aid some of my fellow physicians in understanding this valuable sign of pregnancy brought forward by Hegar, which deserves further study and seems to throw light upon many obscure questions relating to the uterus.

A Bequest.—The late Prof. Wagner, of Leipzig, left between $7000 and $8000 to found a Home for the School Children of Leipzig.

Society Reports.

AMERICAN MEDICAL ASSOCIATION.

Held in Cincinnati, O., May 8, 9, 10 *and* 11, 1888.

Dr. A. Y. P. Garnett, of Washington, D. C., delivered the President's Address, upon the

MISSION OF THE AMERICAN MEDICAL ASSOCIATION.

After speaking of the large number of medical schools and the rapid increase in the number of doctors of medicine in this country to facilitate the attainment of a

HIGHER MEDICAL EDUCATION,

the speaker offered the following propositions:

1. That a standing committee, to be called a

COMMITTEE ON LEGISLATION,

be appointed for each State, Territory, and the District of Columbia, to consist of five members of the medical profession in good standing, three of whom shall have no official connection with any medical school, whose duty it shall be to carry out, as far as possible, the following instructions:

First: That said committees, or a majority thereof, shall attend the sessions of their respective legislatures, or ae often as their duties may require it, for the purpose of using all honorable means looking to the

REDUCTION OF THE NUMBER OF MEDICAL SCHOOLS.

in the United States, and a consequent diminution in the number of medical graduates. As a practical measure to this end, they urge the passage of a law requiring that, in the future, charters for creating medical schools shall contain a clause requiring that a full term of four years' study be required before the granting of a diploma to any student, and that no student shall be matriculated who has not passed an oral and written examination in the ordinary branches of academic study. Further, that any college failing to show a greater number than fifty matriculates annually, for three consecutive years, shall forfeit its charter and be abolished.

Second: That these committees use all diligent effort to secure an ordinance creating a

BOARD OF MEDICAL EXAMINERS

in each State and Territory, which shall have no connection with any medical school, and which shall be required to examine all applicants for license to practice medicine in their respective States. Any person practising any branch of the healing art, without license granted by said board, shall be subject to the penalties as the law may provide. This committee should also be authorized by statute to nominate, to the governers of the State and Territory, competent and learned members of the medical profession to constitute said board of examers.

Third: That the chairman of said committees of five be required to submit, at each annual meeting of this Association a report embracing a full statement of what has been accomplished by each.

II. That the faculties of the several medical schools within the limits of the United States be once more urgently requested to

CALL A CONVENTION

at some central point, for the purpose of consultation and the adoption of some more general and uniform system of medical education. That, in additiod to a four years' term of study, the requirement of a preliminary education including some

KNOWLEDGE OF THE CLASSICS,

shall be suggested. Any school or college which shall refuse to enter into such an arrangement shall be excluded from all connection with the American Medical Association, and its alumni shall not be recognized as members of regular profession.

The speaker said that he was aware that these suggestions embraced some very radical, and seemingly impractic-

able, changes. If these seeds fell upon barren soil, he would at least enjoy the consciousness of having honestly, conscientiously, and fearlessly met the great and pressing issue of the day.

Dr. Roberts Bartholow, of Philadelphia, delivered the

ADDRESS ON GENERAL MEDICINE.

The last International Medical Congress was, in some respects, the most important one that has ever been held, especially in regard to preventive medicine. To an unprejudiced observer it would seem that its proceedings ought to have received some consideration from this public press. Yet such was not the case, and this is the usual

POSITION OF THE PRESS TOWARD THE MEDICAL PROFESSION.

Those organs of public opinion do not ordinarliy regard medical organizations seriously, and they seldom notice matters of the utmost importance to the general welfare of the community which may be discussed at these meetings. A surprising amount of ignorance still exists in this latter part of the nineteenth century, and people still think that the therapeutic art is based on some 'ism or 'pathy. On the Continent of Europe

HOMŒOPATHY IS NEARLY EXTINCT,

but here it still lives, being held up by social influences and by misrepresentations on the part of its advocates. The statistics upon which these men rely to win converts are often made up out of whole cloth, as was done by a Dr. Somers, whose pretended official figures, showing the results of practice in the larger cities of this country, seem to prove that homœopathic methods of treatment are fifty or sixty per cent. more successful in curing disease than are those of legitimate medicine. In one of the large cities of those West circulars were widely distributed in which the claim, based upon these supposed official figures, was made that regular medicine would soon become extinct in this country. The speaker had taken pains to consult the proper authorities in regard to the sources of these alleged official figures, and had found that there were none, and that the statistics were pure fictions. No further argument was necessary to establish the falsity of a system which had to resort to such means to insure its success. The remedy for this, which regular medicine has to offer, is to improve its art.

THE SCIENCE OF THERAPEUTICS

should be made more certain. This is a branch of medical study which is not cultivated as it should be, and a true knowledge of drug-action is not widely enough diffused. The acquisition of this onowledge is greatly hindered by the mass of old prejudices which still cling to this science, and impede its progress like the barnacles on the hull of a ship. All this complexity and superfluity of olden times must be wiped away; at least two-thirds of the pharmacopœial preparations could be dispensed with, and scientific therapeutics would thereby be the gainer.

The knowledge of a drug and of its various constituents should be thorough, and only its active principles, or, if these have not been isolated, its strongest and most constant preparation, should be prescribed. In

THE ALKALOIDS

we have singleness and simplicity of action, and they may also be given in small doses and in a form most agreeable to the patient. This is a matter of no small importance.

The speaker then referred to the

DOSIMETRIC SYSTEM OF MEDICINE,

into the claims of which he had carefully examined, but which he did not consider as in any sense new. Furthermore, the system was crude, and its adherents did not usually base their modes of treatment on true scientific grounds.

A great objection to the employment of a crude drug was its uncertainty of action. In the case of

JABORANDI,

for example, there were two alkaloids, pilocarpine and jaborine, whose action

was dissimilar, and in prescribing the crude drug the practitioner could not be as certain of obtaining the desired result as when an alkaloid was exhibited. Many other drugs, such as opium and nux vomica, offered examples of this same complexity of action. The study of

THE PHYSIOLOGICAL ACTION OF REMEDIES.

as a basis for their scientific use in the case of disease, is still young and dates only from the early part of this century. It is a curious fact that, at the same time that the foundations of our knowledge of the physiological action of remedies were being laid, Hahnemann and Mesmer were imagining the spiritual essence. An illustration of the utility of the modern methods of the study of therapeutics is furnished in the employment of the nitrites in the treatment of angina pectoris. It was through the knowledge of their physiological action, experimentally obtained, that they came to be employed therapeutically. Homœopathy, the speaker maintained, had nothing to do with the progress of modern scientific medicine. The true therapeutic action of drugs was one of antagonism.

Therapeutics also presses into its service the physical forces whose action is fixed and according to known laws. Even the most skeptical is forced to admit the

EFFECTS OF THE GALVANIC CURRENT UPON CONGESTION.

and upon the products of inflammation, such as strictures. Electrolysis is comparatively new in its application, and it is full of therapeutic promise.

THURSDAY MAY 10TH—THIRD DAY.

The Chairman then presented the

REPORT OF THE COMMITTEE ON NOMINATIONS.

in which the following officers were proposed for election. President, W. W. Dawson, of Ohio; First Vice-Presdent, W. L. Schenck, of Kansas; Second Vice-President, Frank Woodbury, of Pennsylvania; Third Vice-President, H. O. Walker, of Michigan; Fourth Vice-President, J. W. Bailey, of Georgia; Treasurer, R. J. Dunglison; of Pennsylvania; Secretary, William B. Atkinson, of Pennsylvania; Librarian, C. H. A. Kleinschmidt, of the District of Columbia; Trustees (to fill vacancies), E. M. Moore, of New York; J. H. Hollister, of Illinois; and J. M. Toner, of the District of Columbia; Members of the Judicial Council, W. A. Phillips, of Kansas; A. M. Pollock, of Pennsylvania; W. C. Van Bibber, of Maryland; J. F. Hibbard, of Indiana; C. S. Wood, of New York; J. M. F. Gaston, of Georgia; W. H. O. Taylor, of New York; and G. L. Porter, of Connecticut; to deliver the Address on General Medicine at the next annual meeting: William Pepper, of Pennsylvania; Address on General Surgery, P. S. Connor, of Ohio; Address on State Medicine, W. H. Welch, of Maryland. For the Committee on State Medicine one member was appointed from each State. Sub-committee to fill vacancies that might occur, J. B. Hamilton, William Brodie, and A. Garcelon. The candidates proposed were unanimously elected. It was announced that the Association would hold its next annual meeting in Newport, R. I., on the second Tuesday in June, 1889. Dr. H. R. Storer, of Rhode Island, was appointed Chairman of the Committee of Arrangements.

Dr. E. M. Moore, of Rochester, N. Y., then delivered the

ANNUAL ADDRESS ON SURGERY.

He reviewed the history of surgery from the earliest times, showing that many of the supposed novelties were in reality only revivals of the methods of the past. But in one particular more than any other the

PROGRESS OF MODERN SURGERY.

was most remarkable, and it was one of prime and vital importance, upon which the success of operations in greatest measure depends; this was in the

TREATMENT OF WOUNDS.

Progress in the management of amputation wounds may be said to have begun with Paré and his ligature of arteries.

At first a limb was amputated by a circular incision, the soft parts and the bone being divided at the same level; then it was thought advisable to cover the bone with integument, and this gave rise to the multiplicity of flaps of all shapes and size. The surgeon always had

TO MEET AND CONTROL HEMORRHAGE,

and it was strange to see how nearly the ancients approached the modern methods of hæmostasis without reaching them. A cord was tied tightly around a limb, but it was long before the tourniquet was devised. A number of bandages were wound around a member to expel the blood from it, yet it is only in our own day that

THE METHOD OF BLOODLESS OPERATION

has been perfected by Esmarch. Before the introduction of the ligature amputation wounds were necessarily left open, and the exposed surfaces were covered with all sorts of ointments. Galen, however, favored the application of a

COLD WATER DRESSING,

and Liston revived this method many centuries later, urging its general adoption in vigorous and characteristic language. After the employment of ligatures had superseded all other methods of controlling hemorrhages from the large vessels, attempts were made to secure primary union by immediate closure of the wound; but they were of very doubtful success until the introduction of antiseptic methods. As regards the question of

AMPUTATION FOR GANGRENE,

the speaker favored the selection of the red line of demarcation for the site of operation, when possible, and he believed the success was far greater in such cases than when the limb was removed at a higher point. In this he differed from most surgical teachers of the present day, the method being a return to that of ancient times.

GUNSHOT WOUNDS

were formerly regarded with the utmost dread, it being supposed that the leaden bullet was an active poison; but since the adoption of thorough antisepsis in wound treatment, surgeons had lost much of their fear in dealing with these injuries. In the matter of

OPERATIONS UPON THE ABDOMINAL CAVITY,

the same changes had taken place. It was no longer thought that the surgeon who dared to remove an ovarian tumor was no better than a murderer, for to such a degree of perfection had the methods of dealing surgically with the peritoneum been brought, that the mortality following laparotomy was now below that attending any other capital operation. Surgeons no longer dreaded to touch the peritoneum, for they had learned by experience that it was not injury that this membrane resented so much as it was dirt. Thorough and absolute cleanliness was the keynote of success, and this was the essence of antiseptic surgery. The name of Lister would be written by posterity alongside of that of Jenner, for he had added a word to the language which would ever remain there, although it was not necessary to use carbolic-acid gauze in order to practise Listerism. Perhaps nothing showed in a more striking manner the results of antisepsis than did the statistics of Volkmann regarding

COMPOUND FRACTURES OF THE LEG.

Of 885 cases of this nature, treated in the civil hospitals of Germany and England prior to the discovery of antiseptic wound treatment, 339 resulted fatally, while of 75 consecutive cases treated since the adoption of antisepsis there was not a single death. Many of these cases were complicated by wounds of the joints, and of those treated conservatively anchylosis had followed in but one instance. The speaker recalled an invitation that he had received fifty-one years ago from Professor Mutter, to see him perform

SUBCUTANEOUS TENOTOMY

of the tendo Achilis. The operation was vehemently opposed by many older surgeons of that day, Barton even re-

fusing to be present and to be a witness of what he considered a most hazardous and unjustifiable operation. These men did not understand the great principle involved in subcutaneous surgery, and little thought that this new method of operation was to be

THE FIRST STEP TOWARD ANTISEPSIS,

which is truly the legitimate descendant of subcutaneous surgery. The surgical world soon, however, awoke to the realization of a great advance in operative procedure, and subcutaneous methods were adopted in all possible cases, their application reaching the most extreme point when Guérin divided all the spinal muscles in his attempt to cure lateral curvature.

Dr. Moore then took up the subject of

COMPOUND DISLOCATION OF THE ANKLE-JOINT.

Amputation in these cases, he believed, was seldom necessary. Even in the most severe cases he advised the adoption of conservative measures, and, if the course of events rendered operation necessary, he would first resort to resection, reserving amputation as the last and most extreme measure. He looked upon

CONTINUOUS WARM-WATER IRRIGATION

as a most effective means of preserving the vitality of the contused soft parts, and preventing sphacelus, when resection was to be performed. The malleoli and their attachments to the astragalus should be preserved, if possible. At first the parts should be immobilized in plaster of Paris; but very delicate passive movements should be begun early and continued carefully from day to day. If such were done, the result would, in most cases, be a perfect preservation of the joint-motion.

The speaker then referred to the employment of hydrochloric acid, one part in twenty, in the

TREATMENT OF CARIES.

This had been recommended at a previous meeting of the Association, and he had tried it with some misgivings, but had found such great benefit to follow its use that he was led to count it as one of the greatest advances of the age in surgical therapeutics. He spoke of the attempts which had been made to secure a sterilized atmosphere in which to operate, which had, however, been hitherto unsuccessful. The spray was often bad, for it favored a deposit of minute foreign particles on the surface of the wound. A striking feature of the present age was that

THE REALLY GREAT MEN OF MEDICAL SCIENCE

were separated by no great distance from their colleagues; there were leaders, it was true, but their disciples followed closely in their steps, and at times even outstripped them. In conclusion, the speaker referred to the

VAST BENEFITS

which had been conferred upon mankind by the members of the medical profession, and by none more than by surgeons. These had long ago left the ranks of the barbers, and were now invading the field formerly regarded as peculiarly that of the physician. The spleen, the kidneys, the intestine, the liver, and the brain had all been subjected to the knife of the surgeon, and it was difficult to define the possibilities of modern surgery, which was an admirable blending of science and action.

DELEGATES TO FOREIGN SOCIETIES:

R. H. Plummer, San Francisco, Cal.; H. A. Kelly, Philadelphia, Pa.; N. S. Davis, Chicago, Ill.; W. H. Myers, Fort Wayne, Ind.; A. E. Hoadly, Chicago, Ill.; F. E. Waxham, Chicago, Ill.; Alexander McAlister, Camden, N. J.; J. J. Chisolm, Baltimore, Md.; D. A. K. Stiele, Chicago, Ill.; J. V. Shoemaker, Philadelphia, Pa.; S. J. Jones, Chicago, Ill.; J. E. Owens, Chicago, Ill.; Ephraim Cutter, New York.; L. A. Sayre, New York.; C. C. Vaughn, Ann Arbor, Mich.

OFFICERS OF SECTIONS

were then announced, as follows: Practice of Medicine, F. C. Shattuck, Boston, Mass., Chairman; G. A. Fackler, Cin-

cinnati, O., Secretary. Surgery, N. P. Dandridge, Cincinnati, O., Chairman; W. Q. Roberts, Louisville, Ky., Secretary. Obstetrics and Gynæcology, W. H. Wathen, Louisville, Ky., Chairman; A. B. Carpenter, Cleveland, O., Secretary. State Medicine, J. B. Lindsley, Nashville, Tenn., Chairman; S. T. Armstrong, Marine Hospital Service, Secretary. Ophthalmology, Otology, and Laryngology, G. E. Frothingham, Ann Arbor, Mich., Chairman; G. C. Savage, Nashville, Tenn., Secretary; Diseases of Children, J. A. Larrabee, Louisville, Ky., Chairman; C. J. Jennings, Detroit, Mich., Secretary. Medical Jurisprudence, W. Kiernan, Chicago, Ill., Chairman; T. B. Evans, Baltimore, Md., Secretary. Dermatology and Syphilography, L. D. Bulkley, New York, Chairman; M. T. Corlett, Cleveland, O., Secretary. Oral and Dental Surgery, F. H. Rehwickles, Chillcothe, O, Chairman; E. S. Talbot, Chicago, Ill., Secretary.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING HELD MAY 3, 1888.

THOMAS M. DRYSDALE, M.D., in the chair.

Dr. Joseph Price reported a case of

TYPHOID FEVER FOLLOWING OVARIOTOMY.

Mrs. E. N. age 37, one child sixteen years ago; one miscarriage fourteen years ago, complaining since miscarriage of great pelvic pain, etc. Was operated on at the Gynecean Hospital, Feb. 11, 1888, for the removal of the right uterin appendages. The tube and ovary were firmly adherent to and under the fundus uteri. The ovary was enlarged and cystic. The removal was not difficult and the operation was completed in twenty minutes. Two years previously the left appendages were removed for a small inflamed and adherent ovarian cyst, the right side at that time appearing perfectly healthy. The recovery from this first operation was speedy and for a year the patient seemed in perfect health. Then the symptoms of pelvic trouble returned and were referred to the right side. From the second operation, the patient reacted perfectly, and for nine days her temperature constantly remained above normal, varying from 98.6° to 100.1°., the intermissions never amounting to one degree. During this time she also complained of a good deal of headache, weakness and mental depression. On the evening of the ninth day her temperature ran up to 102° and she had a slight rigor. From that time she presented a typical case of typhoid fever, including the characteristic temperature record, stools and eruption. The nervous symptoms were not particularly marked. The temperature varied from 99.8° to 104.8° for four weeks. The patient made a good recovery and is now in better health than before the operation.

The points of interest in this case are, first, That the patient was probably in the early stages of typhoid fever when she entered the hospital, there having been no cases of typhoid in or near the hospital at the time. Second, The operation did not seem to influence the course of the fever, nor the fever the result of the operation. Third, The temperature combined with the early constipation and meteorism were naturally attributed to the operation and treated accordingly, until the diagnosis of typhoid fever was made, after which the usual expectant treatment for that disease was pursued.

Dr. Wm. Goodell exhibited a specimen of

HÆMOTO-SALPINX.

The right tube was enlarged to the size of a fist and filled with broken down blood clots. It burst either just before or during the operation for the woman had not complained of abdominal pain and when the abdominal incision was completed, a quantity of bloody serum escaped from the wound. At first examination Dr. Goodell thought it was a case of tubal pregnancy. Both ovaries and tubes were adherent and removed with difficulty. The abdominal cavity was flushed with plain warm

water and a drainage tube put in. The woman recovered promptly.

Dr. Goodell also showed a specimen of

FIBRO-CYSTIC TUMOR OF THE WOMB.

The patient, a single woman, aged 46, had regular but profuse menstruation for several years. Three years ago a tumor was discovered which had gone on increasing. Fluctuation was so marked and the cyst so flaccid that Dr. Goodell thought it was a parovarian cyst. The patient would not permit a vaginal examination; but that could not have thrown any light on the diagnosis. The cyst was multilocular weighing 33½ pounds. It sprang from the right cornu of the womb and had dense parietal and some pelvic adhesions. The pedicle was transfixed and tied, its end scooped out, and the peritoneal edges sewn together by a continuous gut suture. The ovaries being healthy were not removed. Recovery was prompt although the drainage tube had to be kept in for eleven days.

Dr. H. A. Kelly speaking of the first specimen said that he would call attention to an error in nomenclature. If we found a laminated clot in the ampulla of the tube, we termed it a hæmato-salpinx; again in another case where there was a large amount of watery but distinctly bloody fluid, which is unquestionably of a different origin, what the origan is it is impossible at present to say, we call that by the same name. In this second class of cases, he had found by one bad experience that the fluid was intensely poisonous and would produce violent septic peritonitis in a short time if every trace was not removed. The fluid character of the collection causes it to diffuse itself quickly and even the washing seems to cause it to be more thoroughly diffused. He thought it would be well if every case of hæmato-salpinx were reported, bearing in mind the different origin and clinical history of the two classes of cases.

Dr. Howard A. Kelly exhibited a

KNIFE-BLADE TENACULUM.

While he had rarely found in his experience, that local depletion was alone valuable as an agent for the cure of any forms of uterine disease, he frequently found it a powerful adjuvant, similar in its results to the benefits obtained from the cotton tampon.

Chronic or recurring pelvic congestions, accompanied by great pain and discomfort, can often be tapped by a few depletions of the cervix, and the patient's condition temporarily improved. Many of the neurotic symptoms associated with a congested, puffy, blue, plethoric cervix, also undergo marked improvement with this plan of treatment, judiciously carried out, combined with applications of glycerole packs and tamponing.

He knew of no other method equally serviceable and speedy for the treatment of lacerations of the cervix with eversion and infiltration of the lips. Many cases upon which he had heretofore been in the habit of operating, now recover perfectly when thus treated and remain well if the uterus is prevented from sagging, by giving proper support to a torn or relaxed outlet. Except in the latter condition, when associated with laceration, depletion is not often called for in spare or anæmic patients.

To secure any advantage by this method it must be carried out thoroughly. He is in the habit of drawing from six drachms to an ounce, or an ounce and a half of blood every five days or once a week, following the depletion immediately by a glycerole or boric acid pack, which is often retained until the next depletion.

To deplete the congested pelvic organs he has used the cervix on both vaginal and uterine surfaces and the vault of the vagina, the latter being used in a series of experimental studies. He is not sure that it has any special advantage over the simple depletion of the cervix. Serious difficulties have occasionally arisen in other hands from too deep a penetration of the scarifier which may wound an artery of large calibre and give rise to alarming hemorrhage. Difficulties also arise in the use of the spear-pointed instruments, which often

occasion great pain to the patient obliging the operator to desist or to make but few punctures. A serious practical objection against the straight instruments in use, is that the defection can only be practised with safety and satisfaction upon the prominent rounded extremity of the cervix. To obviate these objecjion he had invented the "Knife-blade Tenaculum" here figured, which had been in extensive use in his office for many months.

It is made like an ordinary tenaculum with a blade in place of the hook. This blade is placed at an angle slightly obtuse to the handle and about the same length as the point on the ordinary rectangular uterine tenaculum. In using it the cervix should be fixed by a tenaculum in the uterine canal, when the small, short blade of the instrument can be plunged rapidly in a number of places into the vaginal surface of the cervix anteriorly and laterally and even within the cervical canal being sometimes used to open a very small external os. The shortness of the blade, and the fact that it is placed at an angle to the shaft, prevents a deep and dangerous penetration and if the cutting edge is kept sharp and it is used with rapidity, it occasions as a rule but little pain to the patient.

This tenaculum is made entirely of metal, 7½ inches in length, tapering gracefully from handle to the blade, which is $\frac{3}{16}$ of an inch long; $\frac{1}{16}$ of an inch broad at its base; $\frac{1}{36}$ of an inch wide on its back. A very satisfactory model has made by Mr. Gemrig, of this city, who furnishes the wood cut.

Dr. J. C. DaCosta was glad to hear hear Dr. Kelly speak so highly of the value of depletion in certain diseases of the uterus. He was in the habit of exemplifying this by the exhibition each winter, of one or two suitable cases to his class at the Jefferson Hospital. He thought if from one to four ounces or more blood was removed instead of six drachms, that the effect would be better. A woman who when placed on the table, is suffering with a great pain and with an angry looking cervix will after such treatment leave the table free from pain and with the uterus paled down. The knife exhibited he thought was very pretty, but an ordinary bistoury enabled him to puncture the neck all over and inside as well. Even if an artery were cut it was of small matter. The trouble usually was that the bleeding stopped too soon. If he removed the speculum the bleeding almost always stopped but the speculum was always replaced to make sure that this was stopped.

Dr. Wm. Goodell remarked that there was one point which Dr. DaCosta had overlooked and that was that in most cases simple exposure of the cervix to the air by the speculum will cause it to become pale,although he granted that the effect was assured by the loss of blood. He used to bleed very frequently and occasionally still did so but not so often as formerly because he believed the importance of uterine congestion was overrated. With reference to the hemorrhage while he in a measure agreed with the last speaker, that it was not usually to be feared, yet he had a patient who bled so furously after she reached home that she had to send for a physician to check it. On one occassion while plunging a Battle's spear, he struck a vessel of such a size as to throw a stream of blood directly out of the speculum. But ordinarily the difficulty was to secure enough blood. When the

punctures bleed to much he touched each one with a pointed stick of lunar caustic, which never failed to stop the hemorrhage.

SMALL AND MODERATE VALVULAR LESIONS.—Dr. Milner Fothergill said that in the consideration of valvular lesions of the heart little or no attention was paid to the discrimination of large and small injuries; all were grouped together, and usually the prognosis of the gravest lesions was given to small injuries producing very little effect upon the organisation. In order to grasp the subject properly the facts of comparative anatomy and of embryology must be borne in mind. They saw the primitive heart a mere pulsatile, muscular sac. It was not till the ganoid fishes were reached that imperfect pouch-valves was developed in the bulbus arteriosus. At first the heart had no valves; then imperfect valves appeared, and became more complete as the embryo grew. A valvular lesion was the undoing of evolution previously to the extent of the valve mutilation; and there was all the difference in the world betwixt a small lesion well compensated, and a large one which could not be efficently compensated. He added that Nature compensated a valvular injury by falling back upon the primitive form of heart—the muscular sac. As in evolution valves economised muscular energy, so in dissolution an injury to the valvular mechanism of the higher heart was compensated by muscular growth—a development of the early lower heart—spoken of as "compensatory hypertrophy." When they detected a valvular injury they realised that they could do nothing for that; their hopes were centred on the primitive muscle. If by rest and good food, with cardiac tonics, they could aid Nature's attempt to develop the primitive heart, so far so good. A small lesion was easily compensated, and the compensation was well maintained for many years. Where the injury inflicted was large, complete compensation was unattainable; and such compensation as was possible wore out comparatively soon. Consequently it was of great importance to measure the extent of valve-mutilation in each case, and from that to calculate the chances of the patient. A murmur revealed the existence of valvular injury; but it was dumb as to its extent. For that they must examine the case physiologically, especially in mitral lesions, and test the effect of effort. With a small lesion the patient could run, but not very far; with a moderate lesion he could walk on the flat, but could not get up hills very well, or run; with a large injury all effort was distressing. In strict proportion to the extent of the lesion the organism was crippled and life shortened.—Dr. Money said that the nodules which formed in rheumatism offered some idea of what was going on in the heart.—*Transaction of London Medical Society.*

DECAISNE (E.) ON SMOKER'S VERTIGO.—Of the sixty-three subjects observed the age ranged from twenty-nine to sixty-six years, forty-nine being over fifty years of age. More than half had dyspeptic troubles, alternate constipation and diarrhœa, dyspnœa, polyuria, more or less abundant sweats, insomnia, and palpitation. One third of them had an intermittent pulse and a grandular pharyngitis, some had emphysema, aphthæ, amblyopia, and hemoptysis. In thirty-seven young subjects the vertigo occurred in the morning. In a third of the cases the vertigo commenced as the profuse sweat stopped and as the secretion of urine lessened.

Eight cases had been treated for cerebral congestion or cardiac disease, and had been bled, repeatedly purged, blistered, and given digitalis. In one case the author thinks that bleeding was responsible for the fatal termination of a case.

In twenty-eight cases the vertiginous attack was stopped when at its height by the hypodermic injection of ether. To cure a case tobacco must be stopped, and laxatives, as magnesia, with bitter tonics and tepid baths given. In thirty-seven young subjects the vertigo disappeared by allowing them to smoke after eating.—*Gaz. des Hôpitaux*, April 19th, 1888.

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BALTIMORE, MAY 19TH, 1888.

Editorial.

CINCINNATI MEETING OF THE AMERICAN MEDICAL ASSOCIATION.—The meeting of the American Medical Association held in Cincinnati during the past week deserves to rank among the most successful gatherings in the history of this organization. The attendance was large and the contributions to the work of sections were fully up to those of previoms meetings. The delegation, as was to be expected from the location of the place of meeting, was largely representative of the West, but there was likewise a creditable delegation from the east and south, which was conspicuous from the fact that it contained a number of well-known gentlemen who had opposed the action of the Association in connection with the Congress. The friends and foes of the late embroglio met upon cordial terms and the disturbances of the past were things of the past. All united upon a common purpose to make the Cincinnati meeting a veritable burying ground for former disagreements and a rallying point for the future welfare of the organization. A hasty glance at the papers and addresses read during the meeting might lead to the impression that the work presented was lacking in strong and original features. A closer inspection, we think, will show that the work as a whole deserves to rank above the average and will compare favorably with the annual work of the British Medical Association. It has been a habit upon the part of many critics to belittle the annual work of the American Association. Perhaps there has been good ground for many of the criticisms which have been hurled against the work of the Association in view of the fact that the larger purposes of the Association have been greatly misunderstood. The Association has never claimed to be a highly scientific organization and therefore has not drawn to its support the best productions from the best original workers in the American profession. The special organizations have robbed it of this character of material, to a very large extent, and the profession naturally looks in this latter direction for the most brilliant productions of original workers. The representative character of the American Medical Association makes its membership as fluctuating as its place of meeting and to this extent robs it of that vigorous support it would otherwise receive from a large scientific constituency. The organization is popular in its grasp and in its scope and will always retain such features, by reason of its character, as will draw a popular audience rather than a more select scientific representation. Admitting that the facts here stated have lowered the scientific value of the work presented to the Association, the law of compensation has worked other benefits to the profession as is the outcome of this work. We must regard the Association as an organization *per se* of the entire profession in a general rather than special sense, and as such it represents larger results to the profession at large than a mere scientific body. Whilst it gives full scope to all who wish to promote its scientific features it has a further advantage in its direct influence upon the general practitioner in that it encourages a more careful study of disease and a closer observation of clinical medicine. The wide influence of the British Medi-

cal Association is shown in the impress it has made upon clinical medicine in Great Britain as well as in its systematic organization of the large interests of the entire profession in that country. Our own National Association may, and no doubt, will be moulded into such a shape as to give the profession of our country the many superb features of the British Association. The profession, therefore, should look to its annual meetings as indications of a growing system of professional organization pregnant with good results. The late meeting encourages this idea and certainly strengthens the hope that American medical work is advancing in many directions favorable to the improvement of the science of medicine and to its more enlightened practice.

Miscellany.

WEAK CYLINDER GLASSES FOR THE CORRECTION OF ANNOYING ASTIGMATISM. —At the recent meeting of the American Medical Association in Cincinnati, Dr. Julian J. Chisolm, of Baltimore, read a paper entitled the "One-fourth Dioptric Cylinder the best Astigmatic Lens of the Trial Case." The Text Books do not recognize the necessity of using these weak glasses and many ophthalmic surgeons never prescribe lenses weaker than a ¼ dioptric. The rule laid down in books on Refractive Errors is that anyone who can read the test types designed to be clearly seen at 20 ft., at this distance, cannot have astigmatism. $\frac{20}{20}$ vision is usually accepted as perfect vision. The object of Dr. Chisolm's paper is to refute this position. The majority of young persons with painful eyes who consult him have $\frac{20}{20}$ vision and can read the No. 1 of the test type. They have always considered their eyes strong and could do with them as they pleased. Over study and especially the extra effort demanded for examinations have made their eyes so irritable that now they cannot read for any time, even for a few minutes, without pain. When these cases are carefully examined by the astigmatic dial, although all the lines are seen, some are shaded. The weak cylinder of ¼ dioptric will bring these dull lines out boldly. Their continued use will remove all irregularity from the focusing power of the cornea and will promptly remove all discomfort in the use of the eyes. These patients can resume school work at once as soon as the glasses are obtained. This experience with spectacles sustains the position taken by Dr. Chisolm in a paper published in this JOURNAL one year since, entitled "Rest for Painful Eyes. Is this advice good?" Our readers will remember that in astigmatic eyes rest could only be obtained by the use of properly adjusted cylinder glasses, as these alone correct the organic fault in the form of the eye-ball. The position taken by Dr. Chisolm is, that those specialists who do not recognize small faults in refractive errors do not relieve a large class of patients of their eye annoyances. The wearing of weak glasses will make the difference between not using their eyes at all and having full control of them. Dr. Chisolm's paper was based upon his year's work with astigmatic eyes in his private practic. We append the table which accompanied his paper.

TABLE.—Showing the Degree of Astigmatism in 986 Eyes Prescribed for in the Office Practice of Dr. J. J. Chisolm, of Baltimore, Md., During the Year 1887.

No.	Degree.
546	0.25. D.
171	0.5. D.
66	0.75. D.
60	1. . D.
35	1.25. D.
22	1.5. D.
10	1.75. D.
27	2. . D.
8	2.25. D.
11	2.5. D.
5	2.75. D.
12	3. . D.
6	3.5. D.
2	4. . D.
1	5. . D.
1	5.5. D.
3	6. . D.

TABLE.—Showing the Direction of the Error of Refraction.

No.	Angle.
267	— 0.25°.
90	— 0.25°°.
79	— 0.25 oblique.
29	+ 0.25°.
85	+ 0.25°°.
16	+ 0.25 oblique.
63	— 0.5°.
23	— 0.5°°.
37	— 0.5 oblique.
6	+ 0.5°.
28	+ 0.5°°.
14	+ 0.5 oblique.
23	— 0.75°.
9	— 0.75°°.
15	— 0.75 oblique.
4	+ 0.75°.
10	+ 0.75°°.
7	+ 0.75°°.
15	— 1.°.
6	— 1.°°.
15	— 1. oblique.
1	+ 1.°.
13	+ 1.°°.
10	+ 1. oblique.
9	— 1.25°.
5	— 1.25°°.
12	— 1.25 oblique.
0	+ 1.25°.
5	+ 1.25°°.
4	+ 1.25 oblique.

Advances in the Treament of Syphilis.—Regarding the treatment of primary syphilis, Neisser advances the following propositions:

1. Every local affection suspected of being syphilis must be destroyed by energetic local treatment as early as possible, or removed by a deep incision. Even when the diagnosis is still doubtful, this procedure can only be of benefit. If there is no syphilitic infection present, the slight operation is at least harmless, and if syphilis be present it may undoubtedly be removed once and for all by excision. In all cases subseqnent observation must extend over many months.

2. Well marked primary lesions should be deeply excised when their situation permits of it, as, in the author's opinion, complete cure of the syphilis may be thus brought about.

3. If no operation is undertaken, no better treatment than that of calomel and salt solution or emplast hydrargyri has yet been found.

In regard to constitutional treatment the following conclusions are formulated:

1. Constitutional treatment must be one of mercury. Mercury is the only drug which attacks and destroys the syphilitic virus. All other means and methods are only adjuncts.

2. The constitutional treatment must never be begun before the diagnosis is firmly established.

3. Constitutional treatment must never be considered as completed before the fourth year of the disease, whether symptoms continue to show themselves or not. It consists in frequently repeated energetic cures and milder after-cures, separated by intervals of weeks or perhaps of months according to the constitution of the patient and the course of the disease.

The most agreeable and most easily carried out method of treatment is that by the internal administration of mercury.

Injections with the soluble salts of mercury, although their action is more sure and more marked than in the internal administration of the drug, are not so valuable as inunctions. The authors consider the injections of calomel as an advance step, not yet sufficiently appreciated, its especial advantages being

1. The ease and comfort of the method; four to six injections at intervals of from eight to ten days.

2. The surprisingly rapid and sure results. In respect to the efficacy of this method it is regarded as superior to that by inunction. Inflammatory nodules at the point of injection are reduced to a minimum by the suspension of the calomel in oil. (Calomel vapor, parat, 1,00, ol. oliv. 10, one cubic centimeter for each injection.) It is well to keep in mind the local treatment of all syphilitic eruptions and glandular enlargements at the same time that constitutional treatment is employed. In the dry papular and squamous forms, emplastrum hydrargyri may be used and chrysarobin will often be found useful. Mucous

patches may be touched with a solution of corrosive sublimate in tincture of benzoin (1 to 100). In ulcerating lesions the sub-iodide of bismuth is more efficacious than iodoform, and iodol does not work so well.

For stomatitis, such astringent tinctures as rhatany, galls, myrrh, etc., are useful, with an addition of a few drops of oil of peppermint. In salivation the early employment of atropia is recommended. In mercurial ulceration, hydrobromic acid is the best.

In regard to the use of the iodide of potassium, the author believes in the necessity for large doses in severe forms of the disease. Six, eight or ten grams of the iodide of potassium, or of sodium, being necessary and well borne, especially when taken in milk. Iodol works more slowly; it may be given in half-gram doses, four times a day. Slight iodism does not necessitate cessation of treatment, but it may become necessary to give the bromide of potassium or the extract of belladonna at the same time. He believes in the advantages of the combined or mixed treatment. Baths, sweatings and water cures are only aids to the mercurial treatment.

During pregnancy, energetic measures must be employed to prevent transmission of the offspring.—*Centralb. für Chirurg.* March, 1888.

The Various Modes of Treating Stricture.—Antal thus concludes his article in the *Vierteljahresch. für Derm. und Syph.*, 1887, No. 4.

1. We should endeavor to make out the stricture, so far as possible, in the inflammatory stage, as only in this case can a lasting result be obtained without danger of recurrences.

2. We should choose, if possible, the method of operation which conforms to the stage and nature of the stricture, which we can determine by external touch and examination with the sound, after proper dilatation by means of the endoscope.

3. In regard to the treatment of an inflammatory stricture, he regards gradual dilatation, followed by mild cauterization, as the most appropriate means.

4. In connective tissue strictures, temporary, and where feasible, constant dilatation gives very favorable results, without presenting the dangers of frequent returns.

5. At the end of the dilatation process and cessation of the mechanical irritation, he thinks it advisable to examine the region by means of the endoscope, and if it discloses a gonorrhœal process still existing at the point of stricture or near it, to supply appropriate treatment, and with this precaution we can often prevent rapid and severe recurrence of the stricture.

6. In callousedstrictures, if we could, by hot applications, baths and massage, bring about resorption of the connective tissue hypertrophy, we might secure even such good results from temporary dilatation, as in connective tissue strictures. If, however, the callous stricture cannot be resorbed, the indications for urethrotomy are present, and, according to my views, the external is to be preferred to the internal operation. Where perirurethral ulcers, false passages or fistulæ are present, as complications, external urethrotomy is decidedly the operation to choose.

7. Ring-formed connective tissue strictures of small calibre, situated near the external orifice of the canal; strictures springing from ulcers and valve-like strictures are most simply relieved by internal urethrotomy.

8. Cicatricial strictures brought about by traumatism, are best treated by external urethrotomy, where the removal of the cicatricial portion of the urethra in all such cases is an assured advantage, where the entire reunion of the urethral mucous membrane is practicable, where, however, on account of the extent of the cicatricial tissue, this cannot be carried out, we must be prepared to have severe recurrences after external urethrotomy.

9. Stretching a stricture (divulsion), whereby the healthy, or rather, the more healthy parts of it are wounded, ruptured and bruised, and so lead to traumatic and cicatricial strictures, is, in his opinion, always to be avoided.

Medical Items.

Dr. Wm. A. Hamilton, of this city, died May 14th, at his residence, No. 2217 St. Paul street.

The Medical Society of the State of Pennsylvania will meet in Philadelphia during the first week in June.

At the commencement of the College of Physicians and Surgeons in New York on Thursday, May 10, 120 M. D's. were graduated.

Major Geo. M. Sternberg, U. S. Army, left Baltimore for Havana, April 28, to continue his researches upon the etiology and prevention of yellow fever.

Dr. O. A. Cooke, of this city, aged 48 years, died last week at the residence of his brother, Dr. Theodore Cooke, 914 North Charles street. Death was caused by apoplexy.

Dr. E. S. Dunster, Professor of Obstetrics and Diseases of Women and Children in the University of Michigan, died on May 3rd. Dr. Dunster was born in Maine in 1834. He was one of the best known men in the west.

The "Wiener Klinische Wochenscrift," the first number of which appeared on April 5, is to be published under the editorship of Dr. G. Riehl. It is more pleasing to the eye than most Continental journals.

Mr. Matthew Arnold had disease of both mitral and aortic valves. The affection was apparently hereditary. His father, Dr. Arnold, and two of Matthew Arnold's sons, succumbed to chronic heart disease.

A fashionable obstetric nurse is telling her lady patrons that her dates are all full up to a year in advance. The ladies desirous to stand next in her list will have to be endowed with an unusual amount of prescience.

A prize of $500 from the Elizabeth Thompson Science Fund of Boston, has been awarded to Professor Rosenthal, Professor of Physiology at Erlangen, for "Investigations upon Animal Heat in Healthy and Diseased Organisms."

A good mixture for children: Florida Orange Wine, 6 oz; Cod-liver oil, 2 oz; ext. pancreatis, gr. xx.
This is not a perfect mixture, but shakes up well together, and children take it willingly when they will not touch an emulsion.

The Marshall Hall prize, which is given every fifth year for the best original work done and recorded in the English language during the previous quinquennium in physiological and pathological researches relating to the nervous system, has been awarded recently to Dr. Walter Holbrook Gaskell, F.R.S., Lecturer on Advanced Physiology in the University of Cambridge.

Officers of the Philadelphia Obstetrical Society for the ensuing year: President, Dr. Thos. M. Drysdale; Vice-Presidents, Drs. Charles H. Thomas and J. C. DaCosta; Secretary, Dr. J. M. Baldy; Treasurer, Dr. Alfred Whelen; Curator, Dr. T. Hewson Bradford.

According to the new University Calendar the number of students at the different German Universities in the winter of 1887-88, was as follows: Vienna 2287, Munich 1369, Berlin 1316, Würzburg 956, Leipsic 794, Prague 566, Graz 501, Greisswald 471, Breslau 382, Freiburg 350, Halle 293, Bonn 291, Zürich 265, Marburg 256, Erlangen 255, Strassburg 254, Königsberg 243, Innsbrück 242, Bern 233, Göttingen 229, Kiel 214, Heidelberg 212, Jena 201, Rostock 136, Giessen 134, Basle 122.

Brieger (*Berliner klin. Wochenschrift*, April 23rd, 1888) reports his success in isolating the toxic principle of the tetanus bacillus, *tetanin*. A young man had had his arm crushed and mangled in a machine; Brieger obtained the arm immediately after amputation, treated it chemically, and by a very complicated process claims to have succeeded in obtaining tetanin in a pure condition.

In accordance with a resolution adopted by the Faculty of Medicine of the University of Pennsylvania, the first number of a handsome sixty-four page medical monthly will be issued October 1st, 1888, under the title, *The University Medical Magazine*, edited under the auspices of the Alumni and Faculty of Medicine of the University of Pennsylvania.

The Georgia Medical Association recently held at Rome, its annual session. The following officers were elected for the ensuing year: President; Dr. J. S. Todd, of Atlanta; Vice-Presidents, Dr. J. B. S. Holmes, of Rome; Dr. E. R. Anthony, of Griffin; Secretary, Dr. K. P. Moore, of Macon. The next meeting will be held at Macon, on the third Wednesday in April.

Dr. George W. Rust, one of the most respected and widely-known physicians in the Valley of Virginia, died at his residence in Luray, Va., on May 12th, at the age of 65 years. For a number of years Dr. Rust had, perhaps, the largest and most successful practice in the Page Valley where he was greatly esteemed for his professional skill and zeal, as also for his high traits of character and citizenship. He possessed a well-trained and cultivated mind which he brought to bear upon his professional work with uncommon vigor and good judgment. For some fifteen years past he had retired from the active practice of his profession but continued his unflagging interest in the study of medicine. His advice and experience were frequently sought by his juniors in his profession in his native county and by his former patients. Dr. Rust was eminently a loyal citizen, a warm and generous friend and a true gentleman. His death will be lamented by all who knew him.

Original Articles.

LECTURES ON THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHÉ, M.D.,

Professor of Dermatology and Hygiene in the College of Physicians and Surgeons, Baltimore.

LECTURE VI.

THE NODULAR SYPHILIDE.

[Synonyms: Gummous syphilide, gummy tumor, syphilitic gumma, syphiloma.]

The true gummatous syphilide is a late or tertiary lesion. It may attack any tissue or organ in the body. It was noticed and described by some of the earliest writers upon the venereal disease. Juan Almenar, (1502), Ulrich von Hutten and Giovanni de Vigo (1519), Jerome Fracastor (1530), Nicolas Massa (1532), Leonardo Botallo, (1563), and Gabriele Falloppio (1565) all referred to the occurrence of gummata in the course of syphilis. Falloppio apparently first gave currency to the belief which has found defenders in more recent times, that the administration of mercury was responsible for the appearance of gummy tumors. Ulrich von Hutten had however previously pointed out that gummata occurred in those who did not take mercury as well as in those who used this remedy.

The gummy tumor is a specific manifestation of syphilis. It is found in no other disease and is, when present, characteristic of syphilitic infection. It occurs in the form of globular nodules, beginning in the deeper layers of the skin, or the subcutaneous connective tissue. When the tissue in which the nodules develope is loose, they are movable and non-adherent. Later, as they involve the upper layers of the skin and cause irritative inflammation they become adherent. Usually gummata are not painful unless seated over nerves, or the inflammatory process accompanying them invades the skin, periosteum, or serous membranes, when they cause exquisite suffering. At first the normal color of the integument is preserved, but later, it becomes pinkish, red, brown or bluish-red. In size the nodular syphilide varies from a pea to an almond. In some cases the tumors may reach the size of a hen's egg, but this is rare.

The nodules may undergo resolution, or suppuration. In the former case the growths become softer, flattened and gradually disappear leaving a grayish pigmentation which slowly gives place to a slight atrophic spot showing deficiency of pigment.

In by far the larger number of cases the gummy tumor breaks down and ulcerates. The centre becomes softened and the skin is finally perforated in one or more places, discharging a small quantity of sanious purulent matter. The mass of infiltration constituting the tumor rapidly undergoes suppuration, and a ragged, undermined ulcer is produced which sometimes extends through all intervening tissues to the bone. This is frequently observed in gummy tumors of the forehead and scalp. After the infiltrated material has all been thrown off by suppuration, granulation begins and the ulcer may heal, leaving a pigmented scar to mark its location.

As already mentioned, the tertiary manifestations of syphilis are seldom symmetrical. They are also more limited in distribution and extent, than the secondary eruptions. The nodular syphilide may be limited to a single lesion, but commonly the tumors are more numerous.

Minute Anatomy of the Nodular Syphilide.

Some pathologists have claimed that the histological elements of a syphilitic gumma possess specific characters by which they can be at all times recognized by competent observers. Virchow, however, pointed out that this view is not tenable, as the syphilitic infiltration does not differ from that peculiar to the class termed by him granulomata, to which lupus, leprosy, and tuber,

cle also belong. Since the discovery of the bacilli of leprosy and tuberculosis the new formations in these diseases can be easily differentiated, and the recognition of the tubercle bacillus in lupus gives an additional diagnostic aid between this affection and a syphilitic new growth. It is possible that a confirmation of the asserted discovery of a specific microbe of syphilis by Lustgarten, and by Disse and Taguchi may give the pathologist a means of always making a positive diagnosis of a syphilitic infiltration by means of the microscope. At present the histological diagnosis of syphilis is beset with as many difficulties as are those of cancer and sarcoma. The relations of the infiltrated elements to each other and to the tissue in which they are imbedded must be considered as well as the charters of the individual elements themselves.

The gummy nodule consists according to Kaposi, of a "uniform, dense, small-celled infiltration of the affected tissue. It is not accompanied by the phenomena of inflammatory infiltration such as serous transudation, vascular dilatation and looseness of texture of the connective tissue, but on the contrary, the infiltrated area is drier and denser than normal." Around the circumference of the infiltration there is irritative inflammation with consequent new formation. This is not specific in character, however, and may undergo organisation into cicatricial tissue, which never occurs with the syphilitic infiltration itself. The latter is either absorbed or is thrown off by suppuration or sloughing. It never becomes organised into stable tissue.

Differential Diagnosis of the Nodular Syphilide.

The diagnosis often presents considerable difficulty. When the gummy tumor is softened and on the point of breaking through the skin, the resemblance to a boil or an abscess is often very great. Even when perforation has occurred the gumma may readily be confounded with a boil or carbuncle. The throbbing pain and fever of the furuncle may aid in the diagnosis, but a gummy tumor in certain situations may be extremely painful. Boils and carbuncles usually develope rapidly, while the evolution of a syphilitic nodule is slow, requiring weeks before the covering of integument is sufficiently softened to permit perforation. Should a gumma be incised in mistake for a boil the character of the contents will readily distinguish it from the latter.

Enlarged lymphatic glands and scrofulous infiltration of the skin not rarely present a remarkable resemblance to the gummatous syphilide. The glands can, however, usually be isolated in their proper anatomical location, while the diffuse strumous infiltration which is sometimes seen, especially about the neck, is usually extensively undermined and the soft diseased skin perforated at a number of points from which a thin pus is discharged. The scars of scrofuloderma are also intersected by ridges or papillary elevations. The scar following a syphilide is usually depressed and atrophic, although in rare instances it may present the characters of keloid.

Epithelial molluscum may simulate the nodular syphilide. I have recently seen a case of this affection in a colored woman, in which even the contents of the tumor consisted of a gummy fluid. The principal points of differentiation are the number of lesions, (these are much more numerous in molluscum), the non-indurated base and border of the nodules in the latter affection, and the slight umbilication, marking the duct of the gland whose cystic dilatation causes the disease under consideration. In most cases also, the mulluscum nodules have a constricted neck, *i. e.* are pediculated.

Lenticular cancer of the skin is another affection sometimes mistaken for the nodular syphilide. It occurs in hard, flat, or slightly convex, definitely circumscribed nodules, which are usually secondary to a carcinomatous growth in the vicinity. The surface of the cancerous nodules is smooth, shiny, of a pinkish color, and well supplied with bloodvessels. They do not soften

down in the centre like gummy tumors but ulcerate superficially.

Fatty tumors may be confounded with syphilitic gummatous nodules. Their slow development, soft and semi-elastic consistence and absence of all induration will suffice to make the distinction.

The tumors of erythema nodosum, especially when a clear history of the case cannot be obtained, may simulate very closely the gummatous syphilide. If the patient be kept under observation a few days a diagnosis can usually be made with little difficulty. The lesions of erythema nodosum pass through their successive stages of development much more rapidly than those of the nodular syphilide. The accompanying symptoms, such as pain, localisation of the lesion, fever and color of the nodules may be the same in both affections. Hence an absolute diagnosis is sometimes not possible at sight.

Multiple sarcoma of the skin may very readily be mistaken for the nodular syphilide. The tumors develope slowly, are non-inflammatory, are often of a brownish color and sometimes soften in the centre in a manner to closely resemble the syphilitic nodules. It is extremely important to make the distinction since the prognosis differs so widely in the two diseases. In some cases nothing short of the aid of a trial of specific medication will enable one to make a positive diagnosis. When the disease is advanced and ulceration of the sarcomatous lesions has begun the differentiation is less difficult. Happily multiple sarcoma is very rare and this diagnostic problem will seldom present itself for solution.

Prognosis of the Nodular Syphilide.

The stage of syphilis characterised by the manifestations described in this lecture is the most serious in the history of the disease. During the secondary stage, or period of symmetrical eruption, the lesions are more or less superficial, but in the tertiary stage the deeper structures and organs are liable to invasion. Hence the appearance of superficial gummata, although the lesions in themselves are perhaps of little import, calls attention to the fact that the syphilitic virus is not entirely eliminated and may at any time cause serious mischief. For this reason the gummatous syphilide is always of grave prognostic significance.

SOME CONSIDERATIONS REGARDING DEATH OF THE FŒTUS IN UTERO.*

J. C. HOAG, M.D., OF CHICAGO.

A careful inquiry concerning the comparative frequency of premature expulsion of the impregnated human ovum can scarcely fail to surprise the physician, although anything like statistical accuracy in its determination is, for very obvious reasons, an utter impossibility. In making up an approximate estimate, one must needs remember that the impregnated ovum is often discharged at a menstrual period without the patient's knowledge of any unusual circumstance beyond an increase in the discomforts which often attend menstruation, and which are not infrequently attributed to trivial causes. To say nothing of the patient's ignorance, the physician himself is frequently unable to decide whether such an occurrence, has taken place, even after an examination of the menstrual discharges.

Good authorities are of the opinion that we may safely reckon one case of abortion in the first months of pregnancy to every eight or ten cases of parturition at full term. Accordingly, the importance of careful study, to ascertain as fully as possible the proximate causes of this occurrence, cannot be overestimated, and still the writer believes that there is evidence of great apathy on the part of the profession in this respect, as evidenced in the very terms employed in classifying the causes of abortion. The convenient term "habitual abortion," for example, is one which cloaks a part of our ignorance of this subject. Such an expression as "abortion from unknown causes," would at least be pre-

*Read before the Gynæcological Society of Chicago, March 24, 1888.

ferable as holding forth in its very confession of ignorance an inducement to explore its unknown depths.

As an example of the unsatisfactory state of our knowledge is this direction, one need only turn to the reports of large lying-in hospitals. In an interesting analysis* of two years' work in Prof. Gustave Braun's Clinic, 6,230 labor cases are reviewed. Premature labor† occurred in 565 cases, the causes being tabulated as follows:

Syphilis . .	(about) 70
Pulmonary tuberculosis .	9
Peritonitis	2
Other fevers	23
Faulty placental insertion .	10
Vitium cordis . . .	1
Injuries	7
Eclampsia	1
Induction of labor . .	4
Twin pregnancy . .	43
Total . . .	170

This leaves 395 cases to be relegated to the category of the unknown.

In Braun, Chiari, and Spaeth's analysis of 7,835 cases of labor occurring in the Vienna Hospital for the year 1850–51, 393 cases of premature labor are included. In only 126 cases, or one-third, could the cause be definitely determined.

Causes of the Premature Interruption of Pregnancy.

These may be considered as they relate, 1st, to the father; 2d, to the mother; 3d, to the ovum; and 4th, to traumatism.

Causes referable to the father.—These are constitutional vices, particularly those of syphilitic origin.

Causes referable to the mother.—These include general and local diseases, climatic and hygienic influences, and finally certain idiosyncrasies which seem to be productive of abnormal irritability on the part of the uterus, even in the absence of recognizable lesions.

Causes referable to the ovum.—These comprise all diseased conditions of the fœtus and its appendages.

Traumatism includes accidents, efforts at criminal abortion, and the justifiable induction of labor.

In considering the subject of abortion in general, one can scarcely fail to be struck by the disproportionate frequency in multiparæ, and this seems clearly to depend on local diseases, such as endometritis, metritis, and uterine displacements.

With regard to diseases of the ovum I quote from Charpentier's work as follows: "Considered as a whole, the ovum represents a membranous sac composed of two membranes peculiar to it, the amnion and the chorion, and of one membrane of uterine origin, the decidua, a sac which contains the fœtus, the cord, the placenta, and the amniotic fluid. Each of these parts may be the seat of lesions constituting the pathology of the ovum."

If we exclude attempts at criminal abortion and the justifiable induction of labor, traumatism may be said to include only a small proportion of the causes of abortion; thus, in the two analysis above referred to, we find only 15 cases referable to injuries in a total of 904 cases. These figures, would not, however, represent the proportion in private practice.

But whatever may be the mediate causes of the interruption of pregnancy, the death of the ovum is almost without exception the immediate cause of the awakened uterine activity and the premature expulsion of the product of conception.

Death of the fetus may be determined by disturbances of nutrition, due to faulty development of the ovum, and especially its appendages, which lead to abstraction from the fœtus of its supply of nutriment and oxygen. This may occur when the energy of growth in the membranes is so considerable as to unduly divert the blood supply to their development at the expense of the fœtus, or when suddenly or gradually the ex-

*"Klinische Mittheilungen uber Geburt u. Wochenbett, etc., aus den Jahren 1881 u. 1882," von Dr. C. Furst.

†The terms premature labor, abortion, miscarriage, immature delivery, etc., are so variously used that the writer prefers to quote the exact expressions used by the different authors.

change of blood between the mother and the fœtus is obstructed or destroyed, the one condition prevailing in cases of inflammation of the membranes, which, when affecting the chorion, results in the formation of moles, the other when the uterine mucous membrane is the seat of the chronic inflammation known as endometritis decidua.

Again the exchanges between fœtal and maternal blood may be impaired by maternal hemorrhages, whether from the uterus or from other organs; thus, in cases of hypertrophic development of the tufts of the chorion, the fœtal vessels may be so compressed as to fill the maternal blood-spaces, as seems to be the case in syphilitic disease of the membranes. Extravasations from the placental vessels may also compromise the circulation of the fœtus, and when extensive, cause its death. These extravasations may be produced by comparatively slight mechanical influences, in cases where the vessels have very thin and delicate walls, and particularly in cases of fatty infiltration consecutive to endometritis. Again, extravasations may be caused by local hyperæmia due to the abuse of alcohol, or to fever, uterine displacements or organic diseases of the heart, lungs, or liver.

As for syphilis, this may cause the death of the fœtus either primarily or secondarily. When it develops late in pregnancy, the fœtus may reach full term. When it develops earlier, it is much more likely to result in the interruption of gestation.

The point of this paper is to draw attention to the influence of endometritis, in determining the premature expulsion of the ovum. The great frequency of this disease is a matter of daily observation, and its influence in the production of abortion cannot be doubted.

If a woman aborts frequently, we are apt to say she aborts because she has aborted, she is the subject of habitual abortion. With this we content ourselves, whereas, no doubt, a careful study of these cases would often lead to the discovery of a pathological cause of remedial nature. That a lack of fecundity on the part of a woman is often due to an endometritis, and is overcome by a cure of the diseased condition, is a matter of frequent clinical experience. That systematic writers mention the rôle played by endometritis in the production of abortion, and mention the treatment of the disease as one of the prophylactic measures in the prevention of abortion, is of course true, but it may be safely asserted that the great importance of this subject has not been sufficiently insisted upon, and that, if attention be especially directed to it, the causes and treatment of so-called habitual abortion will soon become much better understood.

In endometritis, extravasations into the hypertrophied tissue of the decidua often take place. If the disease is of moderate extent, or if it develops late in pregnancy, and does not involve the placenta itself, it may be borne without influence upon the development of the fœtus. If, however, it develops earlier or in a severer form, it may often compromise the life of the fœtus by leading to endometritis decidua with its hyperplasia, extravasations, and fatty infiltrations. If the placental decidua be involved, labor, when it comes on, is apt to be complicated by adherent placenta with its consecutive dangers.

The frequency with which one meets examples of adherent placenta, in cases of labor which are otherwise normal, is to me a hint of a link connecting endometritis with abortion.

The discovery of the true pathology of the puerperium has been one of the grandest life-saving discoveries of all times, and in the pathology of pregnancy we have a field which may be made productive of almost as rich harvest of human lives.

Report of Case.—I now offer for your inspection a specimen of macerated fœtus with its appendages. The patient who gave it birth was born in this State. She is 24 years of age, well-developed, weighing about one hundred and sixty pounds, is strong, and claims to have enjoyed very excellent health for the most part. She was married three years ago, her husband being a skilled mechanic of exemplary habits and enjoying fairly good health.

Seven months after marriage, the patient gave birth to a macerated fœtus of six or seven months' development. One year later, this occurence was duplicated. About a year and a half later still, she gave birth to the fœtus which you now see.

The placenta of the first fœtus was somewhat adherent, and did not come away entire. The patient spent two weeks in bed, and, according to her own statement, was pretty sick. Subsequent to this, she enjoyed good health until after the birth of the second fœtus, since which time she has not felt as well as before marriage.

A leucorrhœal discharge made its appearance after the birth of the second fœtus, and has continued most of the time to the present day, and since this event, her menstrual periods have been accompanied by pain, headache, and fever. The patient has never flowed much during labor, and never at all during gestation.

My acquaintance with the patient, began on the 28th day of last December, when I was informed that she had reason to suspect that pregnancy had been interrupted, and requested an examination. I had no hesitancy in pronouncing the fœtus dead, whereat she expressed great regret, saying she had long desired a child, and had believed that this time her hopes would be realized.

The examination revealed a doughy condition of the belly, which was not distended in proportion to the supposed period of gestation. The position of the fœtal parts could not be made out. The os externum admitted one finger. A thick muco-purulent discharge of disagreeable odor was present in considerable quantity.

As regards subjective sensations, the patient said that the last fœtal movements had been felt four days before, and that they had grown gradually feebler before altogether ceasing. She had also experienced sharp pains in the abdomen, and had noticed a feeling as though the fœtus had turned over, such as is often described in connection with a dead fœtus. She had not, however, noticed the other sensations of mawkish taste in the mouth, languor, and a sensation of cold in the abdomen from stoppage of the fœtal circulation, and concomitant abstraction of heat from the uterus—a phenomenon, by the way, which has been made available as a diagnostic point in determining whether the fœtus has died or not.

I advised the patient that she might expect the expulsion of the fœtus in about ten days, and requested her to use the viginal douche.

On the 5th day of January, twelve days after the cessation of fœtal movements, I found the patient in the second stage of labor, the pains having begun some hours before. I had barely time to offer support to the fœtus before it was discharged, with the membranes intact, the placenta soon following under the influence of gentle compression of the uterus. The placenta was intact, and labor ended with a moderate discharge of blood.

With the exception of the presence of a small fresh coagulum on the surface of the placenta, a pale color, and considerable friability of its tissue, I could discern nothing abnormal in its appearance.

The fœtus itself is fourteen inches long, and corresponds to the sixth month of development. It exhibits the usual appearances of maceration in the softening and separation of the epidermis, the dark discoloration of the corium, the flaccidity of the body, the separation of the cranial bones, and the looseness of scalp. These appearances remain very much the same now as they were at birth, and you may judge them for yourselves.

Subsequent to labor, the patient felt very well, with the exception of painful contractions of the uterus and distention of the breasts, conditions which received appropriate treatment. At noon of the sixth day of the puerperium, I was struck by the flushed appearance of the patient's face, and, upon inquiry, found that she had awakened that morning with a severe headache; but it required additional interrogation to elicit the fact that she had also experienced a chill (which she referred to as merely coldness of the feet), and some additional severity

in the pains from uterine contractions.

The temperature, which up to this time had been nearly normal, was now found to measure 100.5°. The lochia was somewhat fetid, but the patient said she had passed no clots whatever. A vaginal examination revealed a sub-involuted uterus. The patient accordingly presented every appearance of one about to enter upon child-bed fever.

At 5 o'clock P.M., the temperature was 101.5°. With the assistance of the husband, I placed the patient upon her side and, introducing a Sim's speculum, proceeded to thoroughly irrigate first the vagina and then the uterus with a carbolic acid solution, employing for this purpose the long glass fenestrated nozzle with double curve, and facilitating its introduction and the subsequent procedures by the use of the double tenaculum forceps.

With a good-sized curette of a modified Sims' pattern, I next proceeded to scrape the placental site, with the result of bringing away, what seemed to me, an enormous quantity of soft pulpy material, composed almost wholly of fibrin and blood-corpuscles and which I now offer for your inspection. I estimated the total bulk of this material as about equal to the volume of a three-ounce phial.

At first I was unable to reach the fundus uteri with the instrument, but after repeated efforts, which resulted in bringing away consistent masses half as large as one's finger, I was able to reach every part of the endometrium. Every stroke of the curette dislodged masses of fibrin, but even after a most vigorous scraping the endometrium at the fundus had a rough, knobby feel.

Following the use of the curette with a renewed employment of the douche and placing some pencils of iodoform in the uterus, I arranged the patient comfortably in bed and was interested to measure her temperature. It had subsided 1.5°. The following morning I find the patient, after a good night's rest, with a normal temperature and feeling far more comfortable than at any time since her labor.

The temperature remained normal for three days, when it exhibited a considerable exacerbation. I accordingly introduced a Sims' speculum again and thoroughly douched the uterus. The speculum was necessary, because I found it impossible to introduce even the convenient nozzle above described without it, and this leads me to remark, parenthetically, that after having employed the intra-uterine douche for nearly six years, I have reached the conclusion that it is occasionally quite impossible to administer it without the assistance of the speculum and that unnecessary violence is often resorted to in attempting to introduce the nozzle. In my case, even with the speculum it was not easy to do so without the aid of the tenaculum. As a corollary to this proposition, I venture the assertion that the physician often deceives himself in believing that he has administered an adequate intra-uterine douche, when in point of fact the nozzle of the douche has barely entered the cervical canal. After the second and last douching, my patient made a rapid recovery.

In this case, I am satisfied that neither the patient nor her husband has ever been the subject of syphilis. The patient herself has undoubtedly long suffered from endometritis, although this was perhaps not the occasion of her first mishap. I believe that a repeated application of the curette in this case and the additional application of topical remedies will effect a cure of the endometritis and enable her to give birth to a healthy child, if she again becomes pregnant.

I have said nothing, however, as yet with regard to another point which may have some bearing on the causal relations of fœtal death in this case. The patient has an abnormally slow pulse, the heart often pulsating as infrequently as forty-four beats to the minute. The relations of heart diseases to pregnancy and parturition have been discussed by various authors, and Matthews Duncan* has suggested the possible influence of such diseases upon the production of abortion.

The more I use the curette in puer-

*Matthews Duncan, Clinical Lectures, 1888.

peral cases, the better pleased I am with it. I prefer an instrument with a large scraping surface and with a long shaft, set in a convenient handle. The presence of foreign bodies in the puerperal uterus is sure to obstruct the progress of involution, and the depth of the canal is altogether disproportionate to the size of the retained decidual or placental tissue or coagulum. Duncan has reported a case where a small bit of placenta was retained in which, at the time of the removal of the tissue eight months after the expulsion of the fœtus, the uterine canal was eight inches deep. In my case I found that involution had made no progress at the time of the curetting, and the instrument which I used, although eleven inches long, was almost too short.

I cannot help feeling that the employment of the finger-nail as a curette is a dangerous procedure. It is of interest in this connection to note the results of some recent experiments by Prof. Fürbringer, as reported in the *N. Y. Med. Record* of March 10th. The experimenter, employing for his subjects thirteen assistants and chiefs of clinics, required them to carefully disinfect their hands according to the most approved methods. He then succeeded in extracting enough septic material from under their finger-nails to start colonies in twelve out of the thirteen cases.

For my own part, I infinitely prefer the curette, which I do not hesitate to use in any case of abortion where I suspect the retention of even small quantities of matter if I deem a removal of it requisite.

I have made some microscopical examinations of the specimen presented this evening, but will refrain from a discussion of the minute pathologicial aspects of fœtal death at present, hoping to make the subject one of more extended study at some future time.

A word with regard to the management of labor in general may not be entirely out of place in this connection. I lean more and more to the side of conservatism in obstetrics. I do not believe that it is *best* to use even the vaginal douche after labor without some special indication for it. As for the intra-uterine douche and the curette, I think they are not very often needed, but that when either one of them is required, the other is apt to be needed too, and certainly I would not think of using the curette without both preceding and following its use with the douche. Further, a single intra-uterine douche is often worth more to the patient, if properly and thoroughly given, than a dozen.

Finally, I would like to reinforce what I wrote in a previous paper, read before this Society, with regard to the value of auscultation and external palpation as enabling us to avoid frequently repeated vaginal examinations. I have very recently read wtih great interest that Credé, always a conservative and successful obstetrican, has of late practically abandoned vaginal examinations, and teachers others to do so. At the time when the paper above referred to was read, I was unaware that any one had ever definitely insisted on this point.

ABSCESSES IN THE EAR AND BRAIN.

BY LAURENCE TURNBULL, M.D.,
OF PHILADELPHIA.

These are the results of acute or chronic inflammation in the middle ear neglected both by patients or their family, or even the result of the doctor's advice not to interfere (with a running ear) and stating that the young person or child would grow out of it, most pernicious advice, in its consequences most fatal to the patient. If the inflammation, acute, subacute or chronic is not properly treated for months and even years, at each relapse, some slight blow, injury, or cold lights up the latent disease, and this is followed by an abscess in, or about the brain, especially if there is a perforation of the drum membrane not healed or protected by an artificial one.

According to Schwartze, one-half of all the abscesses occurring in the brain are due to inflammation of the middle ear.

Lebert and Myers state about one-third.

Schwartze's devotion to the study of this department, and the large experience he has had will be found to coincide with our own, to be the correct one.

These abscesses are found either in the spheno-temporal lobe or sub-dural in the cerebellum. The abscess is usually found in the middle or posterior part of the temporo-sphenoidal lobe or within a circle with a radius of three-fourths of an inch, whose center lies one inch and a quarter above and the same distance behind the center of the auditory meatus. When the cerebellum is the seat of the abscess, it is usually found in the anterior and outer part of the lobe, just back of the posterior surface of the petrous bone. These pathological specimens which I exhibit will help to illustrate these obscure subjects.

No. 1. Showing caries and localized abscess, back of it the temporal bone.

No. 2. Abscess in the cerebellum.

What constitutional means should be employed to prevent such abscesses?

The free use of aconite, belladonna, blisters, bromide and iodide of potassium, cold applications to the head, mercury and pilocarpin. Of the latter agent we inject from three to ten drops until there is a free action on the skin and kidneys.

While the middle ear is to be kept clean, all microbes and every form of bacillus is to be treated by means of antiseptics followed by the free use of quinine, bromo-hydrate or cinchonidia with ergot.

Should a case be brought to us where there is evidence, as is apt to be the case, of a brain abscess with its attending symptoms of headache, diplopia and optic neuritis, temperature of 102° or 103° accompanied by rigor with abnormal reduction of evening temperature together with frequent nausea and vomiting with a history of acute or sub-acute or chronic suppuration of the middle ear, we must be sure of our diagnosis. When and where is the trephine to be applied when all measures have failed? If cerebral or subdural, within a circle with a radius of three-fourths of an inch whose center lies one inch and one-quarter above, and at the same distance behind the center of the auditory meatus.

It it is situated in the cerebellum, we have another important symptom, a lack of coördination in addition to the other symptoms mentioned.

As a rule we draw a line from the post occipital protuberance to the top of the mastoid process, and apply the trephine at the middle of the line, so as to prevent entering the lateral sinus.

It has been found best to employ the flap incision so as to preserve its attachment to the superficial temporal or occipital arteries and the periosteum in continuity with the rest of the flap.

The incision for the flap in cerebellar operations should be a curved one commencing at the post occipital protuberance running downwards and terminating at the apex of the mastoid process.

*Abstract of "Barr and Macewen's Case of Cerebral Abscesses Due to Ear Disease Trephined in the Temporo-Sphenoidal Lobe with Complete Recovery.**

W. H., a boy 9 years old was admitted to the Glasgow Ear Hospital January, 1887. He was one of a large healthy family, and had no previous illness with the exception of whooping-cough. For about a year he had a badly smelling discharge from his right ear. Prior to admission to the hospital he had pain in the affected ear, hot and dry skin, followed by vomiting, with great drowsiness and obstinate constipation, and had been under the care of a physician.

Condition on admission to the Ear Hospital, extreme emaciation, face livid, short, dry cough. There was a perforation in the upper part of the ear membrane, from which some purulent secretion was escaping. There was defective hearing. For two days after admission there seemed to be a lull in the symptoms, on the fourth day, pain returned, with slight rigor. Firm pres-

*Arch's Otology, vol. xvi, June, 1887, p. 146,

sure over the mastoid region elicited pain, yet there was neither redness nor swelling. Temperature 99.6°, and pulse 92. In view of the rigor and tenderness Dr. Barr opened the mastoid cells, by chiselling through the cortex, behind the external auditory canal, and passing a carbolic acid fluid through the antrum and external auditory meatus. But little discharge took place until the 18th when he had another rigor pain in the head became worse when a copious discharge with a most offensive odor took place, but with no relief to the symptoms and the boy seemed to be dying. On consultation of Dr. Gairdner with Dr. Barr they agreed that an abscess existed in the brain, and Dr. Macewen was called to trephine the skull.

The following is Dr. Macewen's description of the boy's condition and operation. On approaching the boy's bed one perceived a heavy fetid odor, traceable to the discharge from the ear. The child was extremely emaciated, with a pale, grayish face, wrinkled skin, prominent check-bones, and somewhat sunken eyeballs. He lay in bed upon his right side, his hand beneath his head, looking as if he were asleep with his eyelids half open. His lips were livid, and on the upper one herpetic eruption remained. His tongue was red and dry, sordes covered the teeth. When an attempt was made to rouse him the upper eyelid drooped, and there was a slight dragging of the angle of the mouth towards the left. The conjunctiva of the right eye was congested, and the lids were smeared with pus. The pupils were equal, about medium size, and responded sluggishly to the action of light. There was pain on percussion over the right temporal region and no œdema about the mastoid region. The veins over the right side of the head and sterno-mastoid muscle and the external jugular veins were prominent and there was pain on pressure near the exit of the vein which passes through the mastoid foramen. The pulse was 50 to 60 per minute. His urine was free from albumen. There was a flow of excessively fœtid pus from the external ear. Frequent cough, with purulent expectoration with an offensive odor, and moist râles over both sides of the chest. There was no difficulty in concluding that the patient suffered from cerebral abscess, originating in septic otitis media. It was almost positive that it was situated in the temporo-sphenoidal lobe. Immediate operation was advised, and with Dr. Barr's concurrence it was at once carried out.

Operation.—The middle ear was washed out with antiseptic solution, also the scalp (which had been shaved) and parts around the ear cleansed with soap and water and turpentine, and finally with alcohol. An anæsthetic was administered. A half inch disc of bone was removed from the squamous portion of the temporal bone at a point an inch and a half above, and half an inch behind, the centre of the external auditory meatus. The bone was normal; the dura mater was here slightly congested, and did not impart any brain impulse to the finger, neither was any discernible when the aperture in the skull was filled with fluid. When the membrane was opened and turned aside the brain tissue immediately bulged into the osseous cavity and rose above the external level. The pia-mater covering it, was congested, and the brain substance had a yellowish red appearance. A hollow needle was inserted into the brain, in a direction which, if introduced far enough, would strike the eminence in the petrous bone above the middle ear. After it had penetrated in the brain tissue for about three-quarters of an inch, there was a sudden escape of foul gas, accompanied by a bubbling sound and the escape of few bits of tissue with fluid. Evidently the upper parts of an abscess cavity had been tapped. The needle was inserted a little further when pus flowed out. It was of an ordinary yellowish color and had an offensive odor. After two drachms had slowly welled away, the aperture in the brain tissue was enlarged by forceps, and portions of the brain tissue, which had become necrosed, were removed. The cavity was then washed out with a saturated solution of boracic acid. It

was evident that there was a considerable zone of purulent inflammation surrounding the abscess cavity, from which the pus continued to ooze. An aperture was then drilled into the base of the skull, just above the osseous boundary of the external auditory meatus, involving the squamo-petrosal suture. The dura mater was examined here, and found intact. It was penetrated, and the abscess cavity was reached. A stream of boracic lotion was passed from this aperture so as to wash out the cavity of the abscess, and it was continued until it passed freely out by the upper opening. The current was then reversed. Even after that, when the drainage-tube was inserted, an oozing of purulent fluid took place into the tube. The ear was again cleansed, chromicized chicken-bone drainage-tubes, were introduced, into both aperatures. The parts were thickly dusted over with boracic acid powder and dressed with sublimated wood-wool pads. When placed in bed, the patient was extremely weak, but rallied after the first few hours. A marked improvement was observed in the first week, and in six weeks he was quite plump. Wound dressed once a week the drainage tube being gradually curtailed. The granulations soon increased in size and rose into the aperture on the bone uniting with the layer which formed in the exterior of the skull and the two become blended together and cicatrization rapidly progressed.

Dr. Reid examined the eyes four weeks after the operation and could find no trace of optic neuritis. On March 17, examination of ear, slight purulent secretion. The hearing was as follows: A watch heard forty inches from the ear in normal hearing, was audible at a distance of five inches and a half ($h = \frac{5\frac{1}{2}}{40}$.) By bone, the condition of hearing was very good. A month after the secreting process under treatment with boracic acid powder was completely at an end, leaving a dry perforation. A dental surgeon filled over the aperture of the bone (the upper aperture) the lower being completely closed with a vulcanide shield to protect the part until filled up with bone.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING HELD APRIL 25, 1888.

The President, J. Solis-Cohen, M.D., in the chair.

Dr. George McClellan reported a

CASE OF AMPUTATION OF THE LEFT HALF OF THE TONGUE FOR EPITHELIOMA.

Michael G., an Irishman, aged forty, was admitted the first of this month to my ward at the Philadelphia Hospital. He stated that he had never had syphilis, and that his general health had always been good—which was borne out by his appearance. He had always been an intemperate smoker of a short-stemmed pipe. Six months ago he first experienced sharp and shooting pain extending from the root of the tongue on the left side down the neck and over the face. A small sore was noticed on the side of the tongue about its middle, which rapidly increased until, at the time of admission to the hospital, it was the size of a half dollar. Articulation and deglutition were interfered with, and there was a constant flow of saliva. There was also, apparently, an enlarged gland in the submaxillary triangle. I diagnosed the disease to be epithelioma, and undertook its removal by amputation on April 11th, just two weeks ago. An incision was made from the symphysis of the chin, a finger's breadth below the jaw as far as the external jugular vein; the deep cervical fascia was torn through with the fingers and knife handle, and the swelling, which was under the sterno-mastoid muscle, proved to be a degenerated gland, or rather cyst, which was filled with thick, cheesy matter. The cyst was evacuated of its contents, the cyst wall torn out as much as possible, and the lingual artery, which was exposed in its relation to the hyoid bone, the hypo-glossal nerve, and digastric muscle, was secured by a ligature. The anterior belly of the digastric was severed, and the mylo-hyoid muscle

with the oral mucous membrane punched through with the finger, and the tongue having been freed from its frænum and pierced at its apex with a strong needle and string, was pulled down into the wound in the neck, as I hoped by so doing to be able to take away the diseased portion by the first incision. This proved unadvisable, owing to the short, thick neck of the patient, and would have endangered the carotid and deep vein, and I at once cut through the commissure of the mouth, and, after tying the coronary arteries, pulled the tongue forward, passed a trocar and canula through the middle of its base close to the hyoid bone, the trocar was withdrawn and the chain of an écraseur was passed through the canula and, after withdrawing the latter, I found the écraseur worked admirably. I then cut off the affected half of the tongue close to the raphé, and was able to show my assistants that the only bleeding vessels from the tongue itself were at its apex. A ligature secured these, and the stump was lightly touched with the Paquelin cautery. Both wounds were then united by interrupted silk sutures and dressed antiseptically. There was a rise of temperature to 103° the evening following, which was reduced by quinine suppositories and sponging. Since then it has been about normal. There was a great deal of venous bleeding during the operation, but very little arterial, owing to the early and prompt securing of the lingual and branches of the facial. Cracked ice and iced milk only were allowed the patient for the first twenty-four hours. The wounds were found healed at the first dressing on the third day, and this morning (April 25th) I saw the patient sitting up in a chair dressed and wishing to go out. He has had no pain whatever, and talks perfectly, and takes nourishment better than for a long time before the operation.

Dr. George McClellan reported a

CASE OF EXCISION AT THE HIP, FOLLOWED BY AMPUTATION.

Riocco V., the Italian, whose limb I amputated after having previously excised the hip, presents some points of unusual interest. He came to this country at the age of eighteen, and while on shipboard had a fall, to which he attributed the trouble in his hip. He worked for six years at his trade as stonecutter, and was finally admitted to the Philadelphia Hospital two years ago, with symptoms of hip-joint disease, and a right basal pneumonia. After recovering from the latter, an incision was made over the great trochanter and pus evacuated but excision was not done, owing to his generally bad condition. When I went on duty at the hospital, March, 1887, I found the patient with a temperature of 104°, and profuse suppuration. I at once excised the head of the femur below the trochanters, and scraped the acetabulum, which was carious. Instant relief followed, as is evidenced by the chart, and within three weeks of the excision I amputated the thigh. The patient made a rapid recovery, and the wound healed, with the exception of one of the lateral margins, which continued to discharge pus and sanious matter until a piece of drainage tube was removed spontaneously, one month ago. He is now fat and hearty, and, although not a beautiful specimen of humanity, is a remarkable instance of what the system can endure after long exhausing suppuration.

DISCUSSION.

Dr. G. G. Davis: I would like to ask Dr. McClellan where he tied the lingual artery. It is usually taught that the proper place to expose this vessel is in the digastric triangle. My own experience, in teaching the operation upon the cadaver, is that it may often be more readily found and ligated behind the digastric, thus obviating the necessity of cutting through the mylo-hyoid muscle. In the hip-joint excision it would be interesting to know how far down the shaft of the bone was removed. If a preliminary resection of the joint and shaft low down is practised, and afterward an amputation through the thigh performed, I believe that the operation

will be of much less gravity than if the whole operative procedure is undertaken at one time. Of course, this refers only to cases in which the condition of the patient is such as to make a primary hip-joint amputation too dangerous.

Dr. McClellan: The lingual artery is not difficult to secure. The landmark is the great cornu of the hyoid bone, and by making a curved incision parallel to the angle of the lower jaw, over it, we can readily expose the looped tendon of the digastric muscle and the stylo-hyoideus. Here the hypo-glossal nerve is found, and the lingual artery passes immediate behind it.

It will be remembered that there was a great mass in the neck, probably due to secondary involvement from the growth on the tongue. The first incision was made with the view of removing the gland and bringing out the tongue laterally by the same means of access. The gland was found beneath the sterno-mastoid muscle, and a dissection to expose it would have endangered not alone the carotid but the deep jugular, which I am loath either to wound or to tie. I therefore tore out the cyst after discharging its contents, and then brought into view the parts over the lingual.

In looking over the history of excision of the tongue, I have been struck with the fact that the different methods adopted all have points worthy of consideration in different cases. The operation of cutting through the symphysis is sometimes practised, also the the horse-shoe sub-mental incision. The lateral operation is applicable only in a long, thin neck. It could not be performed in a short thick neck. The other opera-operation of simply cutting through the oral commissure is very easy and simple, and exposes the parts sufficiently in all cases where the disease is situated behind the middle of the organ. If we simply remember that the deep cervical fascia which loops down the two bellies of the digastric muscle also covers the artery and nerve, we need have no difficulty in finding the lingual, and it is readily distinguished from the nerve which lies in front of it, both upon the cadaver and living patient. The difficulties sometimes experienced in operating on the former are due to the relation of the parts not being properly remembered. As far as I can remember, Mr. Furneaux Jordon was the first who recommended excision of the head of the femur in cases requiring amputation at the hip, in order to diminish shock. The photograph shows long flaps. This is due to the fact that I first excised just below the trochanters, and later at the amputation simply made an incision over the shaft of the bone down to the middle of the thigh. There was very little hemorrhage. The femur was found on the removal to be necrosed all the way to the articular surfaces of the condyles.

Clinical Experience with Some New Drugs.—Dr. Thomas Oliver, (*London Lancet*, May 5th, 1888), writes that salol in his hands has not had any effect in reducing the high temperature of phthisis, nor did it diminish the amount of pus secreted by inflamed surfaces as occurs in pyelitis and cystitis. It is extremely favorable in rheumatic fevers and does not prevent this feeling of depression that the salicylate caused. Antipyrin gives its best results in typhoid fever. The pushing of this drug in fifteen-grain doses is not without danger; it may cause collapse. After the first two doses of fifteen grains, he gives seven to ten grains.

"Scotch Oats Essence."—Dr. Herbert E. Smith, the professor of chemistry in the Department of Medicine in Yale University, writes us as follows, under date of April 14th: "I have recently had occasion to make a chemical examination of 'Scotch Oats Essence' and have separated from the preparation a considerable quantity of morphine. Having since had my attention called to your note on this preparation in the last number of the Journal, it has occurred to me that you might be interested in learning of this confirmation of Dr. Eccles's results, obtained from another sample."—*N. Y. Medical Journal.*

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BALTIMORE, MAY 26TH, 1888.

Editorial.

THE EFFECT OF THE BITTER TONICS ON THE HEALTHY AND DISEASED STOMACH.—There seems to be a fashion in the investigation of scientific subjects as well as in lighter matters. Just now diseases of the stomach, intestines and organs of digestion seem to be occupying much attention in Germany and France, and the result of their work cannot fail to have an influence on this country. America is said to be the land of the free and the dyspeptic, and whether this be true or not, the subject of the treatment of dyspepsia is always worth considering if a new light can be thrown on its treatment. There is probably no more confusion in the treatment of any disease than there is in that of dyspepsia. The theory is to give tonics in some form, but whether these be in the form of acids or of alkalies it is not easy to decide from the symptoms alone. Unfortunately private patients do not care to have a specimen of their gastric juice drawn off and examined at different times of the day in order to test its condition. Still, if we can know the condition of the stomach and gastric juice the treatment is not so difficult to follow.

Dr. Reichmann, of Warsaw, has been making some experimental investigations as to the influence of the bitters on the function of the healthy and diseased stomach, (*Arch. f. klin. Med. Bd.* xiv. H. 1 & 2, 1888.) For a long time bitter medicines were used in treating diseases of the stomach and they were almost regarded as a specific, so much so that even the laity prescribed for themselves bitters and took a dose daily or more often, which was perhaps a mere pretense for getting a drink. The belief generally was that they called forth a feeling of hunger. They increased the secretion of the gastric juice, that is, this increased appetite was considered a sign of increased secretion of gastric juice. The question was how was this increase in the secretion of the gastric juice brought about. Some believed that the bitters increased the intra-vascular pressure and thus increased the secretion of the digestive juices, while others thought that the bitters excited the secretory nerves of the stomach; while again others were of the opinion that this increase was reflected from an excitement of the nerves of taste. Suffice it to say that the effect of bitters is not always to increase the amount of gastric juice. This deduction was made because clinicians blindly referred so many of the symptoms of dyspepsia to a decrease in the amount of gastric juice. Experiments have been carried on with animals through fistulæ to study the effects of different drugs, etc., on the secretion of the gastric juice; but these are of doubtful value as compared with the study on man himself.

Reichmann, knowing that the bitters contained besides bitter principles, ethereal oils, salts, etc., and that the effect was sometimes from the oil or salt present, found it better to use a series of bitters rather than one. The effect was noted not only on the stomach but on the whole digestive tract. In some patients the stomach was affected while the intestines were healthy, and in others the reverse was true. Two groups of bitters were used, the pure and the aromatic.

200 ccm. of a cold infusion of the bitters were invariably used. The stomach was first tested as to its secretory activity and as to the mechanism, course and time of digestion. Four sets of experiments were undertaken.

In the first case the patient took in the

morning fasting an infusion of one of the bitters and after ten minutes the contents of the stomach were drawn off with a syphon and examined. In the second class the patient took fasting 200 ccm. of a cold infusion of one of the bitters, and in thirty minutes (the time it takes for the bitters to disappear from the stomach), 200 ccm. of distilled water at the surrounding temperature were taken and then the stomach contents were drawn off and examined. In the first class the direct effect of the bitters on the secretion of the gastric juice was noted, and in the second class the behavior of the gastric secretion after the disappearance of the bitters from the stomach. In the third class the patient drank every day for several weeks 200 ccm. of one of the bitters and then 200 ccm. of distilled water fasting, and after ten minutes the stomach contents were examined. In the fourth class the patient took fasting the white of an egg and then drank 200 ccm. of a bitter. In 180, 150, 90, 60, or 30 minutes after, the stomach contents were drawn off and examined. The quantity, remains of undigested albumen, peptones, reaction, acidity and reaction for hydrochloric acid were tested.

From these experiments it was concluded that:

1. There was a great difference in the effect of the different bitter medicines on the stomach.

2. In every stomach which was empty or not digesting, where the gastric juice was normally secreted, or where its secretion was either affected or increased, there was a much less activity of secretion immediately after taking the bitters than after taking the distilled water.

3. If the bitter infusion was taken on an empty stomach, the secretory apparatus was excited to an increased activity after the disappearance of this substance from the stomach.

4. When the stomach was digesting (e. g. white of egg) and the bitters were taken, the mechanical activity of the stomach seemed to be injured by the use of the bitters.

4. After taking the bitter infusion for several weeks there was no change in the function of the healthy or diseased stomach, and after the use of the bitters was given up the function of the stomach did not seem to be changed.

Therefore: The bitter medicines should be prescribed only in those cases in which the secretory activity of the stomach is affected; in those cases the bitter medicines should be taken about *a half an hour before eating.*

Present Status of the Medical Law in Maryland.—The bill to regulate the practice of medicine in Maryland having become a law went into effect from the date of its passage, but various causes have operated to prevent its immediate enforcement. We have the assurance of the President of the State Board of Health that this body will proceed to enforce the law just as soon as legal difficulties have been removed and a plan of organization of the work can be arranged by the Board of Health. The bill as signed by the Governor has been submitted to the Attorney-General for his legal opinion as to the constitutionality of law. As soon as his opinion is obtained the Board will proceed to enforce the law in accordance with its provisions. An examination of the bill will satisfy any fair mind that numerous difficulties await the work of the Board and that it cannot at once undertake such a sweeping reform as many are inclined to believe. Quackery has had such a strong hold upon the people of this State that it is not to be presumed that it will be routed by the mere promulgation of the features of the law. The Board of Health has only a limited discretionary power under the law and must therefore proceed with prudence and good judgment to enforce its provisions. The profession of the State has no right to expect the Board to do impossibilities in the very outset of its work. We think the true course to pursue is to aid the Board in its work and stimulate its efforts by a hearty coöperation. In a number of ways the profession can greatly aid the Board in its work. The law requires that every physician engaged in practice in the State for a period of less than ten years

shall present his (or her) diploma to the Board for verification and pay a fee of one dollar. If all who are amenable to this provision of the law will promptly comply with its conditions the Board will soon be in a position to ascertain the number of persons practising without diplomas and can subject the same to an examination or deny them the right to practice in the state.

Regular graduates who know of men who are practising without diplomas should report these parties to the Board. The Board will promptly take notice of such cases. It is the purpose of the Board of Health to secure a room in this city where a book of registration will be kept and where information will be received and given. Certificates will be furnished by the Board and every effort, we understand, will be made to secure a reliable registration of graduates and to ascertain the names and residences of all who are practising medicine without legal authority. Just so soon as the Board can determine who are and who are not entitled to practice medicine in the State it will begin to take legal steps looking to the prosecution of those who are violating the law. To expect a system of prosecution before the work has been carefully organized is out of all reason. We think that time should be given the Board to organize this important work, and then should it fail to do its full duty under the law the profession has the right to hold it to account.

We are authorized to say that an address will soon be issued by the Board to the profession in the State setting forth its plans and purposes in connection with this work imposed on it by the Legislature.

Miscellany.

The Time for the Administration of Certain Medicines.—Iodine and the iodides should be given on an empty stomach. If given during digestion, the acids and starch alter and weaken their action. Acids, as a rule, should be given between meals; acids given before meals check the excessive secretion of the acids of the gastric juice. Irritating and poisonous drugs, such as salts of arsenic, copper, zinc, and iron, should be given directly after meals. Oxide and nitrate of silver should be given after the process of digestion is ended. It given during or close after meals, the chemicals destroy or impair their action. Potassium permanganate also should not be given until the process of digestion is ended, inasmuch as organic matter decomposes it and renders it inert. The active principle of the gastric juice is impaired and rendered inert by corrosive sublimate, tannin, and pure alcohol; hence they should be given at the close of digestion. Malt extracts, cod liver oil, the phosphates, etc., should be given with or directly after food.—*Gaillard's Medical Journal.*

Effect of Food Upon the Composition Nutritive Activity of Mother's Milk.—Dr. St. S. Zaleski, of Dorpat, Russia, concludes a series of papers upon the effects of food on the composition and nutritive activity of mother's milk (*Berliner klin. Wochenschrift*, Jan. 30, 1888), by the following propositions:

1. Totrer's milk, very rich in fat, can of itself exercise a positively injurious influence upon the well-being of the child.

1. A luxurious diet, consisting exclusively of food very rich in albumen increases considerably the quantity of fat in mother's milk, diminishes the sugar of milk, but is of less influence upon the other constituents. Alcoholic beverages have a similar effect.

3. The desirable, and for the child in special cases, indispensable composition of milk, may be attained through suitable diet and nourishment of the mother.

4. In women the effect of food upon the composition of the milk seems to be the same as it is in animals.

5. The fat of milk is in all probability formed, in a direct or indirect way, out of the foods containing the albumen.—*Med. and Surg. Rep.*

Some New Methods of the Use of the Faradic Current in Gynæcology. —Tripier showed 25 years ago that the induced or faradic current was especially serviceable in uterine inflammations by overcoming the muscular inertia and re-establishing the circulatory equilibrium in the uterus. Aspotoli in a more recent work has sought to show that the inflammations of the mucous surface of the uterus are better treated by the methodical application of the continuous current.

1. He modified the method of Tripier who used the method of unipolar or subpubic excitation of the uterus, in which the circuit was made through the abdominal walls. He substituted the bipolar method by which a sound containing the two poles side by side could be applied to any part of the uterine cavity and act on the muscular walls. This concentrates the action and has these advantages.

a. Of being less painful than applying one pole to the skin.

b. It is easier and does away with the necessity of having an assistant.

c. It allows a stronger electric dose since it is less painful.

d. It assures greater efficacy since the therapeutical action is, ceteris paribus, in proportion to the electric intensity used.

This method thus permits of the use of a current, stronger, more intense and more curative. Faradization thus employed is uniform. It should be bipolar and not used in pregnancy, except in the vagina where it is less efficacious but very useful.

2. The faradic current of tension when methodically and appropriately used is the best in gynæcology.

Pain is such an important element in gynæcology, for it is this alone which drives a large part of the women to consult physicians. This pain is either inflammatory or purely nervous. Medicines have tried in vain to conquer these pains. Apostoli boldly affirms that the pain called ovarian, which is met with in hysterical women, is in his opinion curable in 19 women out of 20. At times this inflammatory pain can only be soothed. The following rules should be observed in using this method:

a. Of the two applications possible, bipolar intra-uterine or bipolar vaginal, the intra-uterine will always be more efficacious and the operation of choice.

b. The fundamental principle of success consists in the length of the séances which should continue at least from five to ten or twenty minutes, when the pain will be calmed or relieved. It is never well to end a séance, particularly the first one, without having obtained some benefit. A perimetritis may only be temporarily relieved while an ovarian pain is entirely extinguished in a short time.

c. The séances should be held every day or twice a day in order to keep up the effect.

d. The number of séances can only be determined by the affection. Simple neuralgiæ may be cured in two to five séances while inflammatory troubles require a longer time.

e. The technique of the operation and the dosage varies within wide limits.

1. In a perimetritis, the application should be made gradually and slowly, and should be used frequently in acute cases and in very small doses, which may be increased with the tolerance of the patient and improvement of the inflammation.

All pain should be avoided, especially in the beginning by commencing with zero and slowly increasing, at the same time watching the countenance of the patient.

2. In ovarian pain all means are good, if it be certain that the uterus is healthy. The electrical dose is variable according to the form of hysteria. Sometimes a small dose does good and again a sudden shock is necessary. Each patient must be studied for itself as the sensations are so different.

3. In cases of incomplete vaginismus or neuralgia of the labia, vulva, etc., the faradic current of tension will act curatively.—*Bulletin Général de Therapeutique*, April 30, 1888.

THE MORTALITY-RATE AMONG PHYSICIANS.—The Gotha Life Assurance Bank published some statistics of the mortality among its policy-holders during 1887. From these it appears that the mortality of the medical members was 11.53 per cent. above the average of that of all the members taken together. The classes of disease to which this higher rate of mortality was due were diseases of the respiratory organs, phthisis, and infectious diseases—"typhus" having proved especially fatal to the younger members of the profession. There was only one case of post-mortem poisoning out of 1,052 deaths, and that was of a district physician. Cerebral apoplexy was remarkable frequent, beginning as early as thirty six years of age. There were 14 cases of suicide and 4 of accidental death. These are, however, below the general average.—*Medical Record.*

THE ELIMINATION OF MEDICINE BY THE MAMMARY GLANDS.—From a study of this subject, Dr. John G. Cecil has arrived at the following conclusions: 1. That the practice of medication of the child through its nurse's milk promises very little, and is altogether too uncertain to be relied on. 2. That great caution should be observed in the administration of narcotics to nursing women. 3. That greater care than usual is demanded in the exhibition of drugs during the first days after parturition, and when, for any reason, the milk is poor and thin in quality.—*The American Practitioner and News.*

A NEW MEANS OF DIAGNOSTICATING PENETRATING WOUNDS OF THE INTESTINES.—Dr. Nicholas Senn, of Milwaukee, startled the Surgical Section of the American Medical Association with some experiments intended to show the value of hydrogen in the diagnosis of such wounds. Enemata of the gas were given to dogs for a few minutes, and it was then ignited at the animals' noses; a stab-wound was then inflicted, and it was ignited at the point of puncture. In like manner a pistol-shot wound was diagnosticated. The innocuousness of the gas itself was affirmed and demonstrated.

The experiments were looked upon as of the greatest significance, and Dr. Senn was heartily congratulated.

THE TREATMENT OF DYSMENORRHŒA.—Goubert prescribes for young girls:

Iodoform . .	gr. ½.
Ext. belladonn . .	gr. ⅙.
Asafœtidæ . .	gr. 1½.

In pill form.

Beginning six or eight days before the time of menstruation, six pills should be taken daily.

For adult women he prescribes:

Potass. iodid. . .	℥ 1.
Tinct. croci . .	℥ 2.
Tinct. belladonn . .	℥ 2.
Syrup. aurant. cort.	ad ℥ 6.

Dose, a tablespoonful morning and evening, in any convenient liquid, for a week preceding menstruation.—*Gazette de Gynécologie*, March 1, 1888.—*Medical News.*

A HYPNOTIC FOR USE IN ALCOHOLISM.—Mann, of Brooklyn, in reporting good results in the treatment of alcoholism, states that he found the following a useful hypnotic. At night two tablespoonfuls were given:

℞—Tr. opii deod.,	
Ext. hyoscy. fld. .	āā ℥j.
Chloral hydrat.,	
Pot. bromid. .	āā ℥j.
Tr. capsici. . .	℥ss.
Tr. aconit. rad.	♏ v.
Aq. menth. pip.	q. s. ad. fl. ℥iv.—M.

—*Brooklyn Medical Journal*, April, 1888.

PIGMENTATIONS IN PREGNANCY.—Dr. Monin recommends:

℞ Cacao butter.	
Castor oil, .	āā ℥iiss.
Oxide of Zinc	gr. v.
White Precipitate	gr. ii.
Essence of rose	gr. ii.

M. S. Apply morning and night.—*Jour. of Cut. and Genito-Urinary Dis.*

Noises and the Nerves. — In this bustling civilization of ours, there is a legion of needless noises that rasp our sensitive nerves from day to day, and produce a waste of vital energy.

The believer in the law of the survival of the fittest might suppose that the civilized man would grow insensitive to unpleasant noises, and yet the opposite seems to be the fact in this case. There is an increasing tendency to the aggregation of men in cities, and the activities of city life fill the air with their chaos of discordant sounds, and still human nerves, in place of being toughened become more and more sensitive.

The noises that are incident to modern city life are to a certain extent injurious to health. It is a common belief that noises that we do not consciously notice are not injurious, but this an error. Noises that are so often repeated that we do not notice them, may nevertheless be injuricus and irritate and exhaust the nervous system.

Imagine how monotonous and exhausting it would be to live for years in a continous thunder-storm, and yet, in a modified way, this is what a resident of the business part of a city does. Let anyone stand at an open window in a large city and make the test.

A few years ago a number of gentlemen in London, among them Charles Dickens, petitioned Parliament to restrict organ-grinding and other needless noises, and in this country a number of successful suits have been brought within the past few years, to restrain churches from the too frequent ringing of bells.

If noises are injurious to the healthy, how much more must they affect the sick, who are sensitive and weak. The click of hammers, the rattle of vehicles, the noise of hand-organs, the dull, monotonous hum of traffic—what exquisite and exhausting torture to the sick, with feeble nerves and fevered brain. The wonder is that persons recover under such conditions, and there are doubtless many cases in which the noises of the street have helped to determine a fatal issue.

This is a subject which deeply concerns every medical man in the large cities, for it undoubtedly affects the results of treatment. We do not suggest any remedy, though there are many noises that are wholly needless, and ought to be suppressed.

We wish, however, to call attention of medical men to the matter as concerning the welfare of their patients, and their own professional success.—*Alienist and Neurologist.*

Sane Only During Pregnancy.—During the past year five cases of mental disease were admitted to Dr. Whitwell's private hospital, San Francisco, two of mania, two of melancholia and one of paralytic dementia. There have been seven confinements, one being under the care of Dr. G. E. Davis. The interesting point in this latter case was the fact that the woman had had one child before and was sane only during pregnancy. —*Alienist and Neurologist.*

Galvanization of the Thyroid in Epilepsy.—Sighicelli, having noticed that thyroidectomy produced convulsions of an epileptiform nature in animals, has used galvanism of the thyroid in the treatment of epilepsy. Of seven cases that he reports, in two there was an evident diminution of the epileptic access. A third case was completely cured; that is, the cure has lasted for several months.—*L'Électrothérapie*, Jan. 1888.

Cracked Nipples are treated with great success by Pinard, as follows: As soon as there are any appearances of cracks, or even tenderness of the nipples, a compress, folded in four and steeped in boracic-acid solution, three or four per cent., is applied. Oil silk is placed over the compress to prevent evaporation. Over this a layer of cotton wadding, and the whole secured by a bandage.—*Amer. Practitioner.*

Formula for Migraine.—Dujardin-Beaumetz recommends:

Tincture of gelsemium	f℥iij ℈.
Simple syrup	f℥viij.

M.S. Dose—One tablespoonful three or four times a day.

Medical Items.

Prof. Bartholow highly recommends diluted nitric acid for *hoarseness* of singers.

The American Society of Microscopists meets in Columbus, O., on August 14th.

The Medical Societies of the United States are said to number about six hundred and forty-eight.

A new medical college, with a capital of $50,000, and a faculty of eleven, has just been established in Detroit.

Leprosy is said by M. Besnier to be spreading rapidly, instead of dying out, as has commonly been supposed.

Dr. A. M. Hamilton, of New York, suggests the use of nitrous oxide for the detection of concealed insanity.

The German Society of Gynæcology will hold its second meeting in Halle, on the 24th, 25th, and 26th inst.

During the past term at the Vienna University there were 109 Americans in the medical department.

The *Texas Health Journal*, a monthly publication, edited by Dr. J. R. Briggs, is announced to appear July 1st, 1888, at Dallas, Texas.

A cremation society has been recently organized in Chicago, and a stock company will be formed, and a crematory erected as soon as possible.

Seltzer water allowed to flow slowly but constantly from a siphon bottle upon a burn is said instantly to relieve pain and to hasten final cure.

Dr. J. W. Houck died at his residence, 1005 E. Baltimore Street, on Tuesday, May 22nd, 1888, at 4 A. M. Death was caused by heart disease.

To expel the placenta from the uterus, keep firm pressure over the organ with the hand until well contracted; this is better than kneading. (Parvin.)

The Tri-State Medical Association of Mississippi, Arkansas and Tennessee will meet in Memphis, November 13th, the second Tuesday in the month.

Prof. Virchow has recently made another examination of the sputa and scrapings of the Emperor's throat for malignant disease with negative results.

E. Hurry Fenwick, F.R.C.S., (*London Lancet*, May 5, 1888,) has found that applications of cocaine to the urethral mucous membrane has been able to reduce and cure pain in different parts of the body.

The *British Medical Journal* is responsible for the following: "On June 12th, the University of Bologna will celebrate the 800th year of its existence. This University is said to be the oldest in the world, having been founded by the Emperor Theodosius II. in the year 425 A. D."

German drug stores are apparently rather less trustworthy than American or English, if one may judge from recent revelations. A Berlin Society sent out a long series of bogus prescriptions, containing, for example, "tuber cinereum," "urticaria rubra," "pempuygus foliaceus." These things were dispensed and paid for in over sixty Berlin drug stores.—*Med. Record.*

Dr. Henry D. Chapin at the last meeting of the Section on Public Hygiene and State Medicine of the New York Academy of Medicine, read a paper on "The Survival of the Unfittest," in which he maintained that the methods of our modern civilization tended to perpetuate unfitness and defective types, such as were represented by criminals, lunatics and paupers.

The interesting observation is made by Dr. Underwood, Customs Medical Officers at Kiukiang, China, that the comparative immunity of the Chinese in that region from typhoid fever, notwithstanding most of the factors favoring it are present in abundance, may be attributed to the fact that "cold, unboiled water is rarely or never used when tea can be had.—*Medical Record.*

At the recent Congress of German Surgeons von Bergmann announced a plan for the erection, in a certain location in Berlin, of a memorial building to von Langenbeck. The building is to contain an auditorium seating 700 or 800 persons, and accommodations for a large library. The building will cost about $100,000, half of which is pledged by individuals or by the Society; the rest will be raised by a loan on the building.

The supply bill of the last New York State Legislature contains, says the *Medical Record*, provisions for the better equipment of the quarantine establishment at the port of New York. It provides $50,000 for general repairs, $25,000 for a new hospital ship, $5,000 for the hospital, $2,500 for repairing the docks, $121,843 for putting Hoffman Island, the boarding station, and the Health Officer's residence in order, and $20,000 for a new tug; making a total of $224,343.

We desired to remove an obstinate pelvic cellulitic mass by absorbents. The following proved unexpectedly efficacious:

℞	Ext. belladonnæ, . .	ʒss
	Pulv. camphoræ, . .	ʒj
	Ung. hydrargyri, . .	ʒiiij
	Lanolini, ...	ʒj

M.S.—Apply to the skin over the swelling, on canton flannel.

We have made use of this formula previously, but have never obtained as good effects from it until we substituted lanoline for lard. —*Exchange.*

Original Articles.

ABDOMINAL TUMORS IN THE NEGRO RACE.*

BY WM. PAWSON CHUNN, M.D.,
OF BALTIMORE.

Chief of Clinic for Diseases of Women and Children, University of Maryland; Assistant Surgeon to the Hospital for Women of Maryland, etc.

Generally speaking and as a rule the most interesting cases are found in the experience of those who have seen most and looked longest. Sometimes, however, exceptions appear, and luck accords to some what experience has not presented to others. To a certain extent this luck has occurred to myself, and although like instances may have happened to others, the records of such histories are few and far between. In looking over records of the number of ovariotomies done in all parts of the world one would be surprised to find that out of hundreds and thousands of cases operated upon probably not one was done upon a negro woman. In the September number of the *American Journal of Obstetrics* 1886, (page 967). Dr. H. P. C. Wilson says in discussing this subject, "Although he had examined a great many negro women, he had never seen an ovarian tumor in one." "He had consulted a great many physicians on this subject, and had never found one who had seen an ovarian tumor in a negress." "He had never heard or read of this kind of tumor being found in the African race." As Dr. Wilson's experience has been large, and also in a Southern city, and as other gentlemen present at the meeting of the society of equally large experience had never seen such a case, some idea may be obtained of the great rarity of these tumors in the African race. Indeed literature with the exception of one or two examples, may be searched in vain for information, the only case recorded so far as I know being one by Dr. Atlee, which was three-fourths white. Prof. W. T. Howard, in the President's Address, delivered before the American Gynæcological Society at Washington, D. C., September 23rd, 1885 says, "I have only once seen a uterine fibro-cyst in a negress," and further on in speaking of the diagnosis between that sort of disease and ovarian cystic disease says, "infrequency of occurrence avails little in the African race among whom ovarian cystomata are almost unknown."

After operating upon a negro woman for ovarian cystic disease I sent a short account of the case to Dr. T. A. Emmet, and asked him whether he was familiar with any similar instance—to which he kindly replied that he never knew of such a case before. Drs. T. G Thomas, Barnes, Edis, Courtey, Sims, Graily Hewitt, Byford and others do not even mention the subject. The subject is an important one as will be shown later.

Knowing that Dr. Hunter McGuire, of Richmond, Va., was possessed of a large experience in the South as a surgeon, I wrote him a letter mentioning the cases I had operated upon and asked him whether he had met with any such. He answered that he had "operated three times on negro women for ovarian cystic disease." He also at the time had on hand two additional negro women upon whom he expected to operate in less than a month. He also states that he has operated once upon a negress for fibro-cyst of the uterus which was mistaken for an ovarian cyst. An account of this case may be found in the *Philadelphia Medical News*, April 1st, 1871.

During the summer of 1887 while at Capon Springs, Va., Dr. Taylor, the resident physician, informed me of a case he had seen operated upon in the South a number of years ago by a young army surgeon. The patient was a negro woman and the operation was unsuccessful. The tumor was undoubtedly ovarian. Dr. Thomas A. Ashby, of this city, also informs me that he knew of a similar case.

I also understand that Dr. T. A. Briggs, of Nashville, Tenn., has operated upon four negro women, two of whom proved to have fibro-cysts of the

*Read before the Gynæcological and Obstetrical Society of Baltimore March 8, 1888.

uterus and two ovarian tumors. I wrote to the doctor but never received an answer.

Dr. George W. Porter, Providence, R. I., also reports one case of removal of a multilocular ovarian cystoma in a negress.

Last of all my experience also may be cited consisting of one hysterectomy for fibrocyst of the uterus, one ovariotomy with hysterectomy for ovarian cystic disease, and one ovariotomy on account of a large cyst of the right ovary.

Since beginning this paper I have to add one more operation of ovariotomy for multilocular ovarian cystoma, and Professor Polk, of New York, informs me that Dr. Lee of the same city has also done the same operation in a negress.

So in looking over these histories which I have collected with slight trouble and within the last three months, we find a result of fourteen ovariotomies, and what is still more rare five operations for fibro-cyst of the uterus all of which occurred in the African race.

As a matter of interest I would like to give the details of all these cases together with the results, etc., but unfortunately I was unable to communicate directly with many of the operators and so was deprived of particulars. The point, however, to which I wish particularly to draw attention is the fact that ovarian tumors in the negro race are by no means so rare as has been heretofore supposed. Of course then, this fact, has a direct differential diagnosis.

Heretofore a negro woman appearing with a fluid abdominal tumor would receive small encouragement. She was told in all probably she had a fibro-cyst of the uterus and that and operation would be fatal. Now, however, if a negro woman wants an opinion relative to an abdominal growth presenting the signs and symptoms of ovarian disease, I do not hesitate to make a corresponding diagnosis, and advise operation at once, and that also with confidence and hope for a good result. In the first case of the kind that I ever saw seven *specialists* met in consultation and only one of the seven diagnosticated ovarian disease, nothwithstanding the *only* evidence to the contrary was the fact that the woman was a negress. If this paper then shall assist any one to a correct diagnosis in such cases, and if it should thereby aid any one in making a correct prognosis, it will have accomplished its object. In conclusion the details of my three cases of ovariotomy may not prove uninteresting.

Case I.—L. G., Colored. Aged 20. Abdomen had been enlarging for nearly three years and measured sixty inches in girth. Uterus was pulled up to about the umbilicus and elongated, and was so to speak imbedded in the cyst wall. The patient was operated upon December 22, 1885, and the uterus removed along with an intra-ligmentous cyst. Owing to the malposition of the parts, the right uterus was included in the clamp. On the seventh day, I did a laparotomy for retention of urine in the abdominal cavity and let out about a pint of that fluid, after which my patient gradually went on to a complete recovery. Unfortunately, however, five months after the operation, after carrying a heavy basket up stairs, she died suddenly of pulmonary aneurism. The autopsy disclosed the fact that the right kidney had atrophied to about one third its normal size and that the other kidney having to do the work for both had increased three times its natural bulk.

Case II.—S. J., African, æt 27. Four children. Abdomen immensely distended. The wave of fluctuation was so superficial and distinct in its character that it had been considered a case of ascites. The patient was greatly reduced, vomited continually and had a pulse of about 118 to 120. She was operated upon as soon as possible, July 1887, and a multilocular cystoma of the left ovary removed. As the patient had been tapped six times before I saw her, some of the adhesions were very troublesome. She recovered without a bad symptom.

Case III.—M. S. First seen with Dr. E. M. Wise, of this city. Aged 37 years. Never had been pregnant. The abdomen was considerably enlarged by a growth which had been noticed eight

months previously. This growth had already been examined and diagnosticated to be a fibro-cyst of the uterus by a specialist of this city. The tumor however being uneven in outlines and bulging out in places, and moreover presenting a difference in fluctuation in different directions, together with its short existence, made me decide in favor of an intra-ligamentous cyst.

She was operated upon February 5th, 1888, and an intra-ligamentous cyst removed.

The pelvic partion of the cyst had to be shelled out of the cellular tissue of pelvis and broad ligaments, so that the operation was laborious and tedious.

A drainage tube was inserted, but removed on the third day; no fluid escaped. The patient died on the tenth day of septic peritonitis.

The autopsy disclosed about a pint of bloody serum in the abdomen. I intended to reopen the wound and wash out the abdomen at a venture but as I found no physical sign of fluid, I desisted. It taught this lesson however, viz:

That at times it may be better to leave in a drainage tube longer than three or four days. It also made me decide never to allow a woman, after an operation of the kind, to die without opening the abdomen and trying to find the cause of trouble. The details of these three cases of ovariotomy comprise all that I have to say in reference to that operation.

In regard to the prevalence of fibro-cystic disease, as shown by these statistics, we see that it is nothing like so infrequent as we formerly supposed, particularly when compared with the infrequency of ovarian disease. Formerly, as I say, in any given case of cystic disease of the abdomen in a negress where the diagnosis was doubtful, the opinion was always rendered in favor of fibro-cystic tumor of the uterus. Whereas now other things being equal we would be able to make a diagnosis in favor of an ovarian cyst.

The value and importance of such statistics in evident and renders further comment superfluous.

SOME CASES OF HABIT CHOREA, AND THEIR TREATMENT.*

BY G. E. DE SCHWEINITZ, M.D.,
OF PHILADELPHIA.

As is well known, there are certain local choreas for which no definite cause can be assigned, and in which, as Dr. Wood puts it, the movements closely simulate purposive acts. A child suffering with this malady—for it usually occurs in children, especially girls—is brought for treatment because it has adopted some trick of gesture. An eye may be rapidly winked, or the eyeball rolled upward, or the brow wrinkled, or the facial muscles contorted, or, it may be, the shoulder is shrugged, or a forward movements of the head or jaw indulged in. At first these movements are under the control of the will, but gradually become more and more obstinate, and more and more aggravated, especially when attention is drawn to them, and sometimes the variety of the performances in a single day is truly remarkable. This affection has been admirably described by Dr. S. Weir Mitchell, and from him has received the name Habit Chorea.†

A number of these cases have occurred to me in the past few years, in which the examination and treatment of the eyes have proved of distinct advantage to the patient, and these may prove interesting.

Case I.—A. B., a girl, aged ten, was referred to me by Dr. Wharton Sinkler, February 2, 1885. This child had been brought to Dr. Sinkler about a year before, and then the following facts were elicited: No history of rheumatism; scarlatina when six years old. General health good, appetite and digestion normal. The movements were confined to the orbicularis, the right side of the face and neck, and to the tongue. In spite of the most judicious antichoreic treatment these remained unchanged. The following results were obtained by an eye examination:

*Read before the Philadelphia County Medical Society, May 9, 1888.

†Nervous Diseases, 2d edition, by S. Weir Mitchell, M.D.

O. D. $\frac{15}{XL}$. Amplitude of accomodation 8 D. O. S. $\frac{15}{XXX}$. Amplitude of accommodation 8.5 D.

Conjunctivæ injected, slight blepharitis in each eye and a history of successive crops of styes.

O. D. Small oval disk; choroid ring all around, absorbing at outer side. Retina markedly striated, veiling all edges of disk except the temporal. Many lymph reflexes. O. S. Oval disk, less retinal striation, but inner side of disc veiled.

Atropine solution to full ciliary paralysis was ordered, and the error of refraction determined. This proved to be as follows:

O. D. + 2. s⌒+ 1. c, axis 90. O. S. + 2.25 s⌒+ 0.60 c, axis 90.

The full correction was ordered, the constitutional remedies continued and the result was an entire cure of the spasmodic movements.

Case II.—J. H. B., a lad aged seventeen, referred to me by Dr. S. Weir Mitchell, November 5, 1886. This boy had consulted Dr. Mitchell because he had "got a trick" of twitching his eyes and rolling the balls upward. Before he saw Dr. Mitchell he had been treated with a long course of arsenic and a number of antichoreic and antispasmodic remedies without avail. An eye examination revealed the following points:

O. D. $\frac{15}{XX}$? Amplitude of accommodation 7 D. O. S. $\frac{15}{XX}$. Amplitude of accommodation 6 D.

Conjunctivæ watery and posterior conjunctival vessels injected and tortuous.

O. D. Small nerve, a white patch over central vessels. Retina much striated and general choroidal disturbance, with a hole-like band at the lower and outer side of the disk. O. S. Small nerve. Central lymph-sheath full and nerve surrounded by a broad halo-like band.

Sulphate of hyoscyamia to full ciliary paralysis was ordered, and the correction of the refraction error determined as follows:

O. D. + 0.60 c, axis 60. O. S. + 0.25 s⌒ + 0.60 c. axis 90.

This glass was ordered, and after several months of rest the boy allowed to resume his studies. Ten months later he returned, and the movements had almost absolutely disappeared. His vision then, through the correcting glass, was with each eye, $\frac{15}{XV}$, and the amplitude of accommodation was 10 D. Through these glasses there was at 30 centimetres an exophoria (insufficiency of the interni) of 4 degrees; no disturbance of equipoise at 20 feet. The abducting power was 7 degrees.

Case III.—M. E., a girl, aged eighteen, referred to me by Dr. Wharton Sinkler, May 20, 1887. The patient's mother had chorea when a child. The patient herself was perfectly heathly until she was ten years of age She was then attacked with general chorea, which, however, chiefly affected the face, arms, and the shoulders. At twelve years of age menstruation was established and the chorea ceased, except for the movements of a spasmodic character, which continued in the face, eyelids, and eyebrows. For a time these grew better, but later, for a space of two years, grew worse, and the habit became more fixed. In April, of 1887, the patient was in fair general health, with occasional dyspeptic attacks and dysmenorrhœa. The movements were now confined to the upper part of the face, and consisted in sudden tight closing of the eyes, rapid raising of the eyebrows and wrinkling of the forehead, with to-and-fro movements of the occipito-frontalis, and an occasional jerk of the head and shrug of the shoulder. The movements were not constant, but were increased when attention was drawn to the trouble. The eye examination yielded the following results:

O. D. $\frac{15}{XV}$. Amplitude of accommodation 8 D. O. S. $\frac{15}{XX}$. Amplitude of accommodation 8 D.

Conjunctivæ slightly suffused, distinct dread of light, and the retrotarsal folds studded with numerous phlyctenules. In each eye round disk, slight crescents at the outer sides, and marked retinal striation. Refraction doubtful, fundus best studied with concave glass, probably spasm.

Atropine in full strength was used for four days, and complete ciliary paralysis secured. The vision steadily rose, and on the fourth day was easily $\frac{15}{XII}$, and unimproved by any glass; in short, the eyes were absolutely emmetropic. The mydriatic was continued until all traces of the phlyctenular conjunctivitis had disappeared, and the retinal congestion had subsided. During this treatment the movements markedly decreased, although formerly under the best of internal medication these had stubbornly resisted. About a year later, when last seen, the head movements had entirely ceased; there was an occasional shrug of the shoulder; the eyes were comfortable, the vision and accommodation normal; esophoria 2 degrees at five metres.

Case IV.—D. G., a boy, aged ten, referred to me by Dr. James C. Wilson, under whose care the patient was for catarrhal jaundice. For some time the boy had adopted the habit of "making faces." This peculiarity had well-nigh ceased during a period when he was laid up in bed with an injury. One movement, however, persisted, viz., a remarkable spasmodic contraction of the right orbicularis palpebrarum almost as complete and decided as if a current had been applied to the motor point. The eyes were as follows:

O. D. $\frac{15}{XV}$. Amplitude of accommodation 9 D. O. S. $\frac{15}{XV}$. Amplitude of accommodation 10 D. Exophoria in accommodation 7 degrees.

Eyelids heavy; caruncles swollen. The conjunctiva, especially of the fornix, reddened and velvety, and the lymph-follicles swollen; slight muco-purulent discharge in the mornings. Reading was an effort, and sometimes occasioned headache.

O. D. Round nerve, central venous lymph sheaths. Cumulative instillations of homatropine were ordered, and the refraction tested and found to be O. D. + 0.65 s. O. S. + 0.50 s.

This glass was ordered for all near work, and the local condition in the conjunctiva treated with boric acid, insufflation of calomel, and later painting with a weak solution of nitrate of silver. Internally Dr. Wilson ordered Fowler's solution in ascending doses.

A month later a letter stated that the eyes were more comfortable, and the twitching was seldom noticed.

Case V.—S. B., a girl aged sixteen, referred to me by Dr. S. Weir Mitchell, January 9, 1888. This patient was a finely developed girl, perfectly healthy, no history of rheumatism, scarlatina, or fright. She had formed the habit of rapidly winking, or spasmodically closing the eyes, especially the right one. The movement, at first under the control of the will, gradually became fixed, and was a source of much annoyance and embarrassment. She also suffered from severe brow-ache. An examination of her eyes yielded the following results: O. D. $\frac{15}{XV}$. Amplitude of accommodation 10 D. O. S. $\frac{15}{XV}$. Amplitude of accommodation 10 D. Exophoria in accommodation 7°. The external appearances of the eyes were normal; the conjunctivæ smooth, the vessels free from congestion. Full atropine mydriasis was secured, and the refraction error determined O. D. + 2.25 s. O. S. + 2.25 s.

A full correction was ordered; Fowler's solution was given internally, and one month after the treatment was begun, the headaches had disappeared and the spasmodic movements well-nigh subsided.

Case VI.—A. B., a boy, aged eleven, was brought to me for an eye examination. This lad was of fine physical development, with no family or personal nervous taint, except that he had for some time been noticed to squint his eyes inward, as children often do "for fun," and rapidly close and open his eyes, making at the same time a curious grimace. The boy was very fond of books and this habit was most marked when he was poring over some work which was especially interesting to him. The eye examination was as follows: O.D. $\frac{15}{XV}$. Amplitude of accommodation 8 D. O.S. $\frac{15}{XV}$. Amplitude of accommodation 8 D. No insufficiency.

Conjunctivæ suffused, and posterior vessels injected.

In each eye irregularly oval disks;

conus; full central lymph sheaths, and general retino-choroidal disturbance. H. =1.5 D.V.V. higher. Atropine and correction of the refraction error were advised, but the advice was declined. The boy was, however, forbidden to use his eyes for near work as much as possible and given the usual remedies. When last heard from he was reported as better, but the habit spasm still continued.

Case VII.—W. F. C., a young man, aged eighteen, applied for treatment Jan. 17, 1888. His general health was good. No history of rheumatism. Works hard in a factory. A few years ago, when about twelve years of age, had attacks of "chorea," confined to the muscles of the face, chiefly the orbicularis. This passed away under general treatment. For some months past he had acquired the habit of rapidly closing and shutting his eyes, with a quick, snapping move ment. No other muscles affected. This was partially under control of the will, but was made worse under examination. The eyes were examined and found as follows:

O.D. $\frac{15}{XV}$. Amplitude of accommodation 8.5 D. L. Hyperphoria 1°.

O.S. $\frac{15}{XII}$. Amplitude of accommodation 8.5 D. Exophoria 2°.

Conjunctivæ injected, but not catarrhal, no phlyctenules or swollen lymph follicles. Small oval optic disks; nasal edges veiled, and coarse retinal striatum above and below, veins and central sheaths full. Distinct dread of light.

Atropine was ordered, and continued for several days. Under this the refraction was found to be O.D.+0.60 s. O.S. +0.50 s.

The glasses were ordered for constant wear. No constitutional treatment was given. Some months later he was reported as comfortable, so far as the eyes were concerned, and that the nervousness had departed.

These seven cases suffice to give an idea of what service the correction of the errors of refraction was in the treatment of this disorder. In three of them the habit spasm, as Gowers would say, had existed for a long time, and judicious internal medication and proper hygiene had failed to achieve the desired result; which however, was attained after the eyes had been thoroughly treated and corrected. In two others the constitutional and the eye treatment were begun simultaneously, and the rapid improvement showed the value of this combination. In one instance the eye examination and the correction of the anomalies of refraction were declined, and the habit still continues. In another, the wearing of the glasses was the only course pursued, and the result was most favorable. In all the cases, where errors of refraction existed these were either hypermetropia or hypermetropic astigmatism; in two the errors were 2 D. and more; in three, less than 1 D., and in one the eyes were emmetropic. It is not unworthy to call attention to the fact that so low an error as 0.50 D. may prove an exciting cause, the removal of which aids in restoring the patient to a normal tone. Case III. is especially interesting, because here a general chorea disappeared, and in its place came a habit chorea—for there is no doubt that the disorder in this patient is correctly so classified—exactly as Dr. Mitchell has observed, in a few instances, these cases lapse into well-pronounced chorea of the ordinary type. It is further useful to observe that the eyes in this case were emmetropic, but that when the existing spasm of accomodation and phlyctenular conjunctivitis had disappeared under the use of the atropine, the patient made rapid strides along the road to recovery. This leads me to speak of the value of closely observing the conditions of the conjunctiva, especially of the retro-tarsal folds, in this malady. Years ago, the late Prof. Fr. Horner* called attention to the fact that children, when they first attended school, were sometimes observed to be given to undue winking of the eyes, and that without the presence of strong light. As an accompaniment, there were often movements of the muscles of the face, arm, or leg. In these cases the local cause was most often found to be some disorder of the conjunctiva, especially follicular catarrh, blepharitis, or an anomaly of refraction,

*Handbuch der Kinderkrankheiten. c. Gerhardt, Funfter Band. Zweite Abtheilung. Tubingen, 1888,

usually hypermetropia. Indeed, in a few instances, the local condition was manifestly the exciting cause of a chorea minor. Treatment of the conjunctival catarrh and correction of the hypermetropia, removed the difficulty. Not only may the local conjunctival disturbance and the refraction errors exist, but there may be also imperfect equipoise of the eye-muscles. It is scarcely necessary to refer to this as a possible important factor. In recent times, much graver nervous disorders have been attributed to such insufficiencies of the ocular muscles, and for their correction by surgical and other means, most brilliant results have been claimed.

It is very far from my intention to give an undue importance to these errors of refraction and inflammation of the conjunctiva as exciting agents in the causation of habit chorea. I am not unmindful of the large number of instances that may be directly traced to nasal disorders,† to diseases of the pharynx; nor do I forget that other large class to which no adequate cause can be assigned. I only wish to recall to the memory the value of searching for these among the other causes, and to emphasize the facts that, if the habit spasm especially affects the muscles of the face, particularly those around the eye, the following points deserve attention:

1. The condition of the refraction and the muscular balance should be carefully examined, and, if found abnormal, corrected.

2. The anomaly of refraction should be determined under complete ciliary paralysis and the full, not a partial, correction ordered.

3. This correction should be employed in conjunction with proper internal medication and general hygiene, and not to the exclusion of these measures.

Kultusminister von Gössler recently announced his intention of securing the coöperation of the Imperial Government in suppressing all advertisements of secret remedies throughout the German States.

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†Jacobi: Amer. Journ. Med. Sciences, N. S., 1886. xci. 517-522.

LECTURES ON THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHÉ, M.D.,

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Lecture VII.

THE ULCERATING SYPHILIDE.

As stated in the first lecture, the ulcerating syphilide is consecutive to a syphilitic infiltration which primarily assumed one of the manifestations already discussed. It may follow the moist papular, the pustular, the tubercular, or the nodular syphilide. Its clinical importance entitles it to separate consideration. It must be remembered, however, that the syphilitic ulcer is never a primary affection but always consecutive to a previous infiltration.

The syphilitic ulcer possesses certain features which distinguish it from other similar lesions. These are a rounded shape, steep, or undermined, ragged edges, infiltrated base and border, and pain and tenderness of the ulcer. The ulcerated surface is generally covered with a greyish yellow pus, and sometimes a thick irregular crust masks the destructive lesion beneath.

The ulceration does not extend beyond the syphilitic infiltration. The destructive process ends abruptly where healthy tissue begins. This accounts for the steep edges of the ulcer. The syphilitic ulcer does not enlarge unless there is a continuation of the syphilitic infiltration at its periphery. When healthy tissue is reached the process of repair begins. This can, however, never take place until all the syphilitic new-formation is absorbed or cast off, either by the ulcerative process or by therapeutic means.

The rounded shape of the ulcer is not always maintained as it progresses. It may assume an oval, kidney-shaped, or irregular form. Not infrequently cicatrization takes place at one segment of the ulcer while destruction advances at another. In other cases the ulcer

cicatrizes in the centre, and the ulceration extends peripherally. When several contiguous ulcers run together or when an ulcer extends over a large surface, following the proceeding just described, the lesion is called a serpiginous ulcer or serpiginous syphilide.

Upon the hairy scalp the ulcerating syphilide at first presents the characteristic steep and ragged edges, but as neighboring ulcers run together and the bottom becomes somewhat covered with granulations, the ulceration becomes more shallow, with prominent, undermined edges, and easily bleeding base. The secretion is thin, sero-purulent, and offensive. Mixed with the secretion from the sebaceous glands it dries into thick, dirty greenish-yellow crusts and scabs which have a rancid odor. The pus may penetrate under the scalp and collect in depending positions as the back of the neck or the eyelids, and be accompanied by erysipelas and glandular enlargements. The granulations may become hypertrophic, projecting from one-fourth to half an inch above the surface. These bleed easily and secrete a serous fluid which dries into crusts. These hypertrophic granulations sometimes become veritable papillomata.

The cranial bones are sometimes though not very frequently laid bare by the ulcerative process. When this takes place, necrosis of a circumscribed portion of the outer table of the skull is likely to occur. In rare cases, even the dura mater is laid bare by necrosis of the cranium in its entire thickness. Strange to say the meningeal membrane is very seldom destroyed by the ulcerative process.

The diagnosis of the ulcerative syphilide of the scalp is sometimes rendered difficult by the absence of a connected history and occasionally by the results of local therapeutic interference which may mask the characteristics of the affection. I have seen one case of extensive epithelioma of the scalp in which the diagnosis was exceedingly difficult. In fact the suspicion is still strong in my mind that the ulceration in this case was syphilitic in the first place and only became malignant in consequence of the long continued irritation. The peculiar and characteristic infiltration of the border is the only mark of differentiation between the cancerous and syphilitic ulceration.

Lupus is generally easily differentiated by its history, the fact that the ulcers are usually shallow and painless, not secreting an offensive pus, and extending by nodules at the periphery. The secretion and crusts of a lupous ulcer of the scalp are usually less profuse and abundant than in the ulcerating syphilide.

That curious disease of the hair follicles of the occipital region, described by Kaposi as dermatitis papillaris capillitii and by English authors as acne keloid, bears many resemblances to a gummato-ulcerating syphilide. The only point of differentiation to which I can call attention is the localisation of the eruption, and the characteristic "bunching" of the hairs in the follicles.

The syphilitic ulcer of the face sometimes presents a very close resemblance to epithelioma. The absence of the hard infiltration characteristic of cancer, and the rapid progress of the syphilitic ulceration will generally allow a definite diagnosis. Probably the greatest difficulty will be prevented, however, by the differentiation between the ulcerating syphilide and lupus. When it occurs upon the nose the resemblance between the two processes is sometimes so close that the best clinicians will be unable to make a positive diagnosis. In these cases the history of the case will often be a very useful aid. Lupus is slow in progress and in by far the majority of cases begins before the twentieth year. The ulcerating syphilide is rapidly destructive and is rarely found before adult life. A case in which the ulcerating syphilide occurs will often show other manifestations of syphilis, or relics of the same. Thus glandular enlargements, scars of the genitals, or of the mucous membrane of the mouth and throat, evidences of old iritis, in female patients, repeated

abortions, or the birth of dead children at term; sometimes the physical condition of the offspring will shed light on an obscure case. All these things must be borne in mind and carefully considered when great difficulty arises in the differentiation of these affections. When other means fail a specific course of treatment will often enable a positive diagnosis to be made in the course of two or three weeks.

In leprosy ulcerations occur which may be mistaken for the ulcerating syphilide, but the accompanying symptoms of that disease already pointed out in a previous lecture, should make the diagnosis easy. As a general rule, the ulcerations in leprosy are shallower and less destructive than those of syphilis.

In the neighborhood of joints, the ulcerating syphilide is sometimes very persistent, progressing superficially in a serpiginous form. This variety of syphilitic ulceration is not infrequently found about the shoulder and elbow. It resembles lupus most closely but can generally be differentiated by the characters above pointed out.

One of the most frequent seats of the ulcerating syphilide is the leg and thigh. When occupying the leg, the syphilitic ulcer presents certain characteristics which should render a diagnosis comparatively easy. An English surgeon, Mr. Maunder I believe, has pointed out that syphilitic ulcers of the leg are generally multiple and occupy the upper half of the leg, while traumatic or varicose ulcers are usually single and located near the ankle. The cause of this localisation of varicose ulcers near the ankle has been explained by Mr. Hilton in his profound lectures on "Rest and Pain." "The superficial and deep veins of the leg freely communicate with each other in the neighborhood of the ankle-joint. The first two inches above that point is the spot where the greatest stress is laid upon these superficial veins, below that point they freely communicate, and if the blood connot return by superficial veins, it can do so by the deep veins, and *vice versa*. But when you reach the point where that brown patch of skin so often occurs in old persons, above the inner malleolus, the anastomoses are less free, and this appears to me to be the reason why ulcers from varicose veins occur so frequently about that neighborhood."

In some cases, the clinical features of elephantiasis arabum are simulated by syphilitic ulceration of the lower extremities and its consequences. In fact in these cases we have practically the same pathological condition that exists in elephantiasis, namely obstruction and dilatation of lymph-channels and consequent new formation of connective tissue.

Prognosis of the Ulcerating Syphilide.

The prognosis of the ulcerating syphilide, if the process is uninfluenced by treatment, is unfavorable. In most cases the ulceration does not only continue until the initial infiltration is destroyed, but new deposit of the morbid material continues at the periphery and the ulcerative process is indefinitely prolonged. Appropriate therapeutic measures however, will in the majority of cases produce rapid absorption or destruction of the infiltration and healing of the ulcer. If therefore a correct diagnosis is made the prognosis is generally favorable.

Society Reports.

THE GYNÆCOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

STATED MEETING HELD MAY 8, 1888.

Dr. H. P. C. Wilson, the President, in the chair.

Dr. Wm. Pawson Chunn read a paper entitled

ABDOMINAL TUMORS IN THE NEGRO RACE.*

DISCUSSION.

Dr. Opie thought the paper of especial value because it proved that the formerly

*See page 81.

almost universal idea, that the negro was not subject to ovarian tumors, was erroneous.

Dr. H. P. C. Wilson said he believed that ovarian cystomas were exceedingly rarely, if ever, found in the the negro race. He had examined a great many negro women with abdominal tumors in his own practice, as well as in the practice of other physicians, and he had never found an ovarian cystoma in a single instance. He had examined a great many authors, and he had yet to find but one case, in which an ovarian cystoma had been removed from a negress, and that was by Dr. Atlee. It should be observed that in this case the women was three-fourths or four-fifths white, and surely was more entitled to follow the law of tumors in the white than in the black. This woman could not be classed among negroes for pathological purposes.

He believed that many tumors had been removed from the negress supposed to be ovarian cystomas, which were not. He had seen several such cases, and prominently one which has been published repeatedly as an "Ovarian Cystoma Removed from a Negress," which was anything else but *ovarian*. Par-ovarian cystomas and interligamentous cystomas are frequently mistaken for ovarian cystomas.

The inter-ligamentous variety is not uncommonly found in the negress, and in some cases removed under the impression that it is ovarian, when it does not grow from the ovary or have any connection with it.

He believes that operators are often mistaken in the character of tumors, which they have removed. He has never seen, or read of a case that has been satisfactorily demonstrated to him, to be an ovarian cystoma, in a negress.

Dr. Chunn, in closing, stated that he felt certain of his diagnosis in each of his cases and verified the same with the knife. *All* the cases presented *all* the symptoms and signs indicative of ovarian cystic disease in such a manner as to make the diagnosis clear.

Dr. P. C. Williams then read a paper on

CHLOROFORM IN OBSTETRICS.

Dr. Opie remarked, that he accepted the almost unanimous teaching of recent obstetric authors, that all anodynes limit the pains of labor, that limitation of the contractions when pushed far lead to relaxation of the uterus and, as a consequence, to post-partum hæmorrhage.

He very seldom uses chloroform in the first stage of labor, except in certain operative cases.

As an agent for promoting rest and relief from pain in the first stage, he uses morphia.

There are three conditions in which this drug may be advocated as especially serviceable; first, in the primiparæ, where the os remains rigid and undilated, despite tormenting and long continued pains; secondly, in multiparæ, where there exists delay, because of cicatricial tissue in the os, the result of former labors and thirdly, in all hyperæsthetic cases, when delay and agony greatly exhaust and depress the spirits of the parturient woman.

Chloroform mitigates the pain, morphia relieves it more effectually. Chloral he thought, was relatively insufficient as an anodyne, and another serious objection to it is, that the patient, unless fully under its effect, is generally boisterous. He uses chloroform in the second stage when necessary to allay excessive pain and when operative procedures are resorted to, but not in all forceps cases. Before the head has passed through the pelvic excavation, it is sometimes a disadvantage, since it lessons the *vis-a-tergo* and necessitates on the part of the operator a proportionately greater power. He thought that chloroform pushed to the surgical degree gives danger from hæmorrhage and is rarely called for, except when rapid delivery is demanded in the interest of mother or child or at the end of the second stage, to save the perineum.

Dr. Neale considered the subject one of great practical interest as chloroform is the most important drug that obstetricians employ.

Its marked immunity from danger when administered during parturition

had been attributed to the tendency of the physiologically hypertrophied heart of the pregnant woman to prevent cerebral anæmia.

He had known to it relieve a functionally rigid os during the first stage and believed it served many important uses during the second stage of labor. When administered during uterine contractions it certainly would "blunt the pains" of labor without, as a general thing, materially retarding its progress, and the amount required to produce this effect varied greatly with the given case.

Hence he agreed with the views expressed by the author of the paper in the main, but thought there were many minor obstetrical procedures that did not require the use of choloform.

As regards Dr. Opie's remarks upon its undesirable effects during forceps operation, he had certainly seen the uterus act most powerfully and afford ample *vis-a-tergo* even when the patient was profoundly narcotized during the performance of this or any other obstetrical operation. In fact, with or without chloroform, he did not think the dynamic action of the forceps was altogether theoretical.

He could not deny that the drug did occasionally predispose to post-partum hæmorrhage, but thought its danger in this respect had been exaggerated and should not weigh heavily against its use, and he referred to the views of Prof. Fordyce Barker in support of this opinion.

Ergot, he thought, was given during labor altogether too much and too soon; yet if he correctly understood Dr. Williams' paper it might be innocuous, or even beneficial when used as he proposed. It is, however, a safe general rule never to give ergot until the uterus is thoroughly evacuated.

Dr. Page said that he was accustomed to give chloroform in most of his cases, and has noticed that women who decline to take it have the worst experience afterwards. He has, in protracted cases, put off using it until other drugs had been tried, and was satisfied that valuable time had thus been lost. He related a case of antero-posterior contraction of the uterus, with which he tried the forceps, and then version, and succeeded in delivering her only when she was so weakened by fatigue and exhaustion that uterine resistance succumbed; in contrast he told of several cases of primiparæ readily delivered with the assistance of the relaxation produced by chloroform. He often has debated the time for beginning with the anæsthetic, but concluded that each case must serve for its own rule.

Dr. H. M. Wilson remarked that he uses chloroform constantly but not so freely as Dr. Williams—giving enough to blunt the pain in the second and third stages of labor. If he finds it necessary to interfere instrumentally then he gives it freely until complete anæsthesia is produced. In his experience he has never had any considerable flooding following its use.

Dr. Browne thought that chloroform does sometimes cause post-partum hæmorrhage, for certainly the uterus does not contract as fully and rapidly as without it. Ergot used in properly selected cases, might counteract this tendency, as when the os is freely dilatable or fully dilated, in which manner he had often used it, and when from eclampsia or other causes rapid delivery is necessary, ergot should be at hand to use hypodermatically. He had seen children borne much depressed by the use of chloroform—some even nearly asphyxiated.

Dr. Williams, in reply to a question of Dr. H. M. Wilson, said that in tedious cases he often gives chloral in doses large enough to dull the pain and permit the case to go on until it had progressed to a point when chloroform could be administered with benefit.

In reference to the effect of chloroform upon the child, he could only repeat, what he had already stated in his "paper". He had never seen a child fatally asphyxiated by chloroform given during labor. He has seen children that were apparently in a sound sleep under the chloroform—but they soon roused and experienced no ill effect.

He could not agree with Dr. Opie

that chloroform so far "restricted" the pains as to render its use of doubtful benefit in ordinary cases of labor. Dr. Williams regarded this opinion as *purely theoretical* and entirely unsustained by experience. His experience had taught him that while this was true in a few cases—yet in the great majority of cases it not only did not restrain the pains, but that it greatly increased their efficiency by effectually removing the inhibitory pain of the fear that so often retarded the progress of the labor. In all cases theory must be submitted to the test of experience. According to Dr. Opie's theory the use of chloroform predisposes to post-partum hæmorrhage by diminishing the pain of uterine contraction.

If this be true, it follows necessarily that the more frequently chloroform is given, the more frequently must there be post-partum hæmorrhage. Does experience sustain such an opinion? Dr. Williams is satisfied that it does not.

The only severe cases of post-partum hæmorrhage that had occurred in his practice occurred *before* he had adopted the use of chloroform. This is a significant fact!

He believes that post-partum hæmorrhage is due, in great degree, to uterine exhaustion produced by long, tedious labors. This opinion is fully corroborrated by Dr. Fordyce Baker in a very interesting and instructive paper which he recently published in the "*Medical News.*" Dr. Williams believes that chloroform by overcoming the muscular rigidity of the cervix and the perineum, shortens the labor and thus prevents the exhaustion which tends to produce the hæmorrhage. Chloroform therefore prevents rather than produces post-partum hæmorrhage.

In reference to the second stage of labor. Dr. Williams can only say that he does not share in the modern emphatic condemnation of its employement. He uses it very frequently and often times with most happy results of course. Ergot should never be begun when the cervix or perineum are so rigid as to indicate a long labor; but when both cervix and perineum are freely dilatable then is it a most efficacious means of increasing the power of the pains and shortening the labor.

This result is especially marked when chloroform has been pushed to its full physiological effect.

Dr. Opie could see no good to be derived from the use of ergot as recommended by Dr. Williams, since the operator cannot estimate with any degree of certainty, the resistances to be overcome and the time which may elapse before the delivery of the child. Ergot administered hypodermically under ordinary circumstances after labor, acts in a few minutes. As Dr. Williams gives it, it must be held in abeyance by the chloroform and too, just at the critical juncture and time of anæsthetic relaxation.

Dr. Williams' experience as to the effect of chloroform on the child, does not agree with my own. My observation accords with the statement of Charpentier, who says, the effect of the anæsthetic on the child, is nil.

Dr. G. Lane Taneyhill then read a paper entitled

A FEW THOUGHTS ON ATRESIA OF THE VULVA AND VAGINA, WITH RELATION OF CASES.

Dr. H. M. Wilson could recall three cases in his experience. One was caused by the formation of a cicatricial band, following laceration in labor; the second was caused by a fall during bathing, and was sufficient to interfere with marital relations. It was relieved by incision and the insertion of a vaginal plug. The third case was in consultation. The medical attendant was called when labor pains were felt but on examination could not introduce the fingers beyond the hymen, nor indeed could he detect any opening. Upon his arrival, by close observation, a minute orifice could be seen which enlarged with each pain. As it offered no obstacle at the instant, a feeling of curiosity delayed surgical interference. When the head reached the membrane the relaxation was complete.

Dr. P. C. Williams spoke of cases; one a young girl, strong and healthy,

who had every month typical menstrual pains, without a flow, and who showed when examined an imperforate hymen. This he incised freely, giving exit to a large quantity of retained blood, and the girl recovered without further trouble. He knew that a free incision has been opposed by some authors, but from his own experience in his, and other cases, he saw no reason for the slow method of treatment in preference to a free incision.

Dr. B. B. Browne said he had seen quite a number of cases of atresia of the vagina; complete occlusion of the hymen he thought was of rare occurrence; he thought that the distinction between these two conditions should always be borne in mind.

Congenital atresia of the vagina is frequently confounded with imperforate hymen; the former is an occlusion of the lower portion of the vagina immediately behind the hymen; this occlusion is of embryonic origin, and is caused by defective development of the lower portion of Müller's ducts, and is sometimes improperly described as a double hymen. More frequently, however, it is overlooked or mistaken for the hymen itself, from the fact that it is pressed forward by the accummulated blood in hæmatometra and hæmatokolpos and lies almost in immediate contact with the hymen. He related two cases of traumatic atresia following instrumental delivery, in one of which a puckered condition of the mucous membrane existed at the seat of the atresia; through this a fine probe could be passed into the peritoneal cavity; in the other the whole cervix had sloughed away and complete arrest of menstruation had continued for eighteen months; a new channel was made into the uterus and menstruation restored by the use of the faradic current. He then read his conclusions published in a former paper upon this subject; they were as follow:

1. Nearly all the malformations of the female sexual organs, previous to puberty, result from arrest of development.

2. As the upper and lower portions of Müller's ducts develop independently of each other, we may find the ovaries developed without the uterus, and *vice versa.*

3. Perfect development of the external genital organs and the mammary glands does not preclude defective development of the vagina, uterus or ovaries.

4. Entire absence of the uterus or ovaries can only be determined by post-mortem examination or by laparotomy.

5. A patulous urethra which invariably occurs with atresia of the vagina is not the result of sexual intercourse through this organ, but is caused by arrest of development.

6. In congenital atresia of the vagina a patulous urethra is the rule, unacquired atresia it is the exception.

Dr. Wm. E. Moseley then read a paper on

THE HOT INTRA-UTERINE DOUCHE IN PURULENT ENDOMETRITIS.

Correspondence.

ANSWER TO CORRESPONDENCE.

"Morphia" has had great trouble in treating a patient with the morphia habit and writes to the JOURNAL asking the best treatment as he has used ordinary means without success. A physician of this city who has had a large amount of experience with such cases writes us the following reply which seems to be a satisfactory response to our correspondent.

"This question involves a volume of reply. An opium-eater is a medical terror. First the moral facilities are absolutely obtunded whilst the intellectual are morbidly bright. They are utterly unreliable—no promise is sacred—their only aim in life is the enjoyment of their opium lust.

The only method of treatment is, to place them under lock and key. Then you can gradually reduce their daily allowance of opium until they get none. A course of tonics and occupation will complete the cure if the patient is willing to be cured. The various specific cures are rankest quackery. I have cured some hysterical hypodermic morphine-

users by professing to give the drug for months at a time and, when certain moral strength has been attained, announcing that I have used nothing but water. But I would rather treat the vilest whiskey-drinker than the most æsthetic opium eater. There are works written on the subject, prescriptions of various concoctions vaunted as specifics; but, I know of one hopeful method and that is to deprive them of the poison at the earliest possible moment, to place them in their own room under incorruptible surveillance and prevent them from access to the poison. Be prepared for every deceit and falsehood—never trust them."

Cyclic or Physiological Albuminuria.—Dr. Robert Barnes commenting in the *London Lancet*, of May 12th, 1888, on the explanation given by Pavy, George Johnson and others as to the cause of cyclic albuminuria, questions, upon strictly clinical evidence, the reality of a nephritis as the common explanation of the so-called physiological albuminuria. During the period of gestation there is intense hyperæmia of the mucous membrane in the vaginal portion of the uterus and fundus and this surface is covered with a creamy discharge of ephithelial cells in a state of fatty degeneration. A similar condition is found in other mucous tracts and it is in the highest degree probable that the mucous membrane of the glandular structure of the kidneys suffers in like manner. From this we may infer that no structural lesion of the kidney is necessary. Just as in scarlet fever, so here, the kidney conditions attending the initiatory stages of albuminuria and convulsions, are simply the result of the high vascular tension which tells upon the whole mucous tract, and of the attendant high nervous tension. This theory is in harmony with the late Mahomed's observations and was overlooked in the recent discussion in the Obstetrical Society of London on Scarlatina in Pregnancy and Puerpery.

Unabsorbed Pills.—We constantly read or hear about cases in which pills have not been digested and absorbed, being unfrequently passed in the same condition as far as rotundity of form and perfection of coating are concerned as when first ingested.

The external "Why?" has been put in requisition here as in everything else, and various theories have been advanced as to the cause, probable, or more often fanciful, of the non-absorption of that beautiful and most elf *looking* pharmaceutical preparation, the "Sugar Coated" Pill.

The following excerpt from Remington in his "Practice of Pharmacy" has suggested to us a very probable solution of the question, why are sugar coated pills passed unaltered? In the description of the process of putting a finish or polish on the pill he says:

"A polish is given to the pills by agitating them in a bag or rolling them in a shaker in contact with a piece of *wax* or *parafin*."

Now, how even a pill manufacturer could imagine a combination of ferments, peptic, pancreatic, or biliary in the human economy which would be possessed of sufficient strength to dissolve a *paraffin* coated pill we fail to perceive.—*Med. Science.*

The Monopoly of Antipyrine.—The French Board of Hospital Charities (Administration de l'Assistance publique) has decided to institute the manufacture of and supply the hospitals of Paris with antipyrine, which will henceforth be dispensed under the name *analgesine.*

This move will tend to break the monopoly in this valuable medicine, with whose chemical composition and methods of fabrication manufacturing pharmacists are sufficiently familiar.

The firm that has hitherto had the monopoly of the manufacture and supply of dimethyloxyquinizine, because of the patent on the name *antipyrine*, has become immensely rich out of the large profits accruing from this monopoly. Attention has frequently been directed in these columns to that objectionable feature of antipyrine—that, although its chemical composition was known, it was a patent and proprietary drug.—*Boston Medical and Surgical Journal.*

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BALTIMORE, JUNE 2ND, 1888.

Editorial.

WONDERFUL CASES.—The belief that "figures do not lie" is not as firm as it formerly was. An army of figures enticingly arrayed in columns and called "statistics" is one of the greatest sources of misstatements. Statistics mislead to an alarming extent, and he who swallows down a mass of statistics without thought or consideration is very apt to use them, even unintentionally, in a false sense. For example the statement by a clergyman that there were not churches enough in this city was perfectly true, and his statement that there was not seating room in all these churches for the people of the city, was also true. But if he had taken the total number of inhabitants and had subtracted from it, all those who by reason of extreme youth or age, illness, enforced duties, care of the sick, young and aged, the remaining people could be easily seated in the combined number of churches here. Not only statistics but many statements are uttered, cases related and cures vaunted without sufficient ground.

Dr. A., has a case of supposed intussusception which he alone sees and cures and afterward reports at a society as a remarkable case of intussusception which he had treated and cured without an operation. A statistician reads this case and puts it down among those cured, and some unfortunate uses the statistics in a later paper. Dr. B., fluent in many languages, reads in a French paper that Dr. X., of Paris, has just originated a most delicate and valuable test for the detection of albumen in urine. He straightway performs the test to his own and others' satisfaction and then publishes an account of the test with his cases, honestly giving Dr. X., of Paris all just due for the test. The English-reading public read the report, try the test and also find it excellent and in their reports of future cases refer to it as B.'s test. Poor Dr. X. is forgotten and Dr. B. has the honors.

Again Dr. C., performs a series of operations on different patients for the removal of very remarkable and rare forms of tumor. The services of a pathologist are dispensed with in making the diagnosis which is based largely on the symptoms and general appearance. The statistician reads the report and notes accordingly. Dr. D. has a very peculiar case, the symptoms of which seems to cover exactly those of an aortic aneurism. He reads carefully and examines the patient often, but as in the case of Dr. C. he makes the diagnosis unaided without a consultant, gives the iodide and bromide of potash with brilliant results and reports it as a "remarkable case of aortic aneurism with a cure."

The moral is evident, statistics should not be falsified by such cases and a desire for glory should not lead men into making a reputation which is often not deserved.

MEDICAL EXAMINING BOARD OF VIRGINIA.—The May number of the *Virginia Medical Monthly* contains a very full report of the first session of the Medical Examining Board of Virginia, under the amended law, approved March 3, 1888, and in view of the facts that Maryland has a new law which attempts to regulate the practice of medicine, and that so many of the graduates of our city colleges settle in Virginia, it may

not be uninteresting to cite some of the principal points of this meeting.

The principal feature of the recently amended law relating to the Medical Examining Board of Virginia is, that hereafter all candidates for examination for license to practise medicine, surgery, etc., in the State of Virginia, shall appear before the Board *in regular session*, instead of allowing any candidates to appear before three individual members of the Board, at their respective homes, as formerly. Provision, however, is made for cases of emergency, which claim of *emergency* must be decided by the President of the Board.

Those who do not know the history of the Virginia law may be interested to know that the Medical Examining Board of Virginia went into effect January 1, 1885. Any one having had a license to practise medicine or surgery anywhere in the state of Virginia prior to that date was exempt from the operation of this law. But any other person, who, since that date, had undertaken to practise medicine, surgery, etc., for compensation, without first having received a duly signed certificate of having passed a satisfactory examination before the Medical Examining Board of Virginia, and having his name "registered in the clerk's office of the county or corporation court for the county or corporation in which he should reside," as practising illegally; and on conviction before any courts of the Commonwealth, should be fined "not less than $50 nor more than $500 for each offence, and should be debarred from receiving any compensation for services rendered as such physician or surgeon."

Under the by-laws approved at the last meeting of the Board "the applicant is required to answer at least *three-fourths* of the questions satisfactorily, and he is to be rejected if he fails to answer satisfactorily *thirty-three and one-third* per cent. of the questions on any one Section or subdivision of the whole examination. He is also required to sign his papers with a number furnished him by the Secretary, who shall record the number after the applicant's name on his registered list to be kept for the purpose, and only the President and Secretary shall be allowed to examine the aggregate sheet during the examination."

In all examinations before the Board, if not distinctly so stated, it is always implied and understood that each party undergoing examination pledges his word of honor, without mental reservation, or evasion in any manner whatsoever, that during such examination he will neither give to a fellow candidate, nor receive from him or from any other improper source, any information relating to the subject immediately under consideration, unless it be with the knowledge and consent of the Examining Committee.

The time allotted to make answers to questions in each Section is three hours.

It is refreshing to see that in spite of the opposition of the Richmond Medical College, the Board repealed this law and thus fully protects the people of Virginia against unqualified practitioners. It will be a very long time before Maryland will have such a strict law free from all politics.

Obstetrics in America and in Germany.—In Vienna the best facilities are afforded of studying obstetrics, because it is the most immoral city in Europe, with few exceptions. The large number of children, mostly illegimate, born in General Hospitals there make it the favorite place for the study of this subject, and this is so well known partly because few physicians go to Vienna and to this hospital without studying obstetrics and taking "touch courses," and communicating the results of their study to their unwilling aud long-suffering fellow-countrymen at home.

The reason why the various methods of diagnosticating the different periods of pregnancy are so fully studied, described and taught by the professors of obstetrics in Germany, is because from the combined advantages (?) of immorality and immodesty of a large number

of a certain class of women any methods may be practised at will; and again the people being accustomed to being governed and obeying without a murmur, submit in hospitals to any form of examination used.

When we come to practise obstetrics in this country in a large city among a good class of people, it is astonishing how even the superficial form of examination is not tolerated by so many of the tender sex. Often it takes a tiring amount of persuasion to secure a vaginal examination even at the time of expected confinement; and as for palpating or using Hegar's method, such a thing would cost anyone, even a very well and favorably known practitioner, his case. Of course there is occasionally found a woman who intelligently appreciates the importance of a careful examination, even by palpation, several times before confinement, but this is often because she has heard of the death of a friend in labor, and with the fear of death above all things at this time, she rather submits than not. There are plenty of practitioners in this city who never examine a woman at all until after labor, and it is only blind luck, as far as the attendant is concerned that prevents such women from dying with a contracted pelvis or an impacted fœtal head. Here an intelligent midwife is to be preferred because she is allowed an examination and often knows enough to recognize an abnormal condition, even if she does not know exactly what it is.

Miscellany.

Agaricine in the Sweating of Phthisis.—Piermy the author, has experimented recently in Prof. Pribrams' clinic with this new alkaloid, prepared from the alcoholic extract of the white Agaric; he gives it in doses from $\frac{1}{60}$ to $\frac{2}{75}$ of a grain without any effect sometimes, but generally diminishes a profuse sweating when he gives it in $\frac{2}{75}$ of a grain or more; he had the following results.

1. Agaricine nearly always decreases the sweating in consumptives.
2. It has no modifying effect on the respiration.
3. In cases of profuse sweating, when suppressed by this alkaloid, the pulmonary and skin functions were not modified.
4. The result seems to depend on lessening the absorption of water as the thirst and urine were diminished under its use.
5. A few pills of $\frac{1}{6}$ of a grain each of agaricine would arrest a profuse sweating in four or five hours.
6. The use of agaricine gives no inconvenience whatever afterwards.
7. The feebleness of the consumptive is diminished, but the other symptoms are not modified.—(*Farmacesta Italiano et Jour. de Med. et Farmacol.*)

A Novel Reason for Declining a Consultation.—Professor Kremianski, says *The Lancet*, has recently been invited to take a journey from his residence in Kharkoff in Russia to Xeres in Spain, to attend a consultation in a case of phthisis, the local physicians being disposed to employ his system, which is sometimes, though not very correctly, described as the "aniline treatment." This consultation the professor has declined, on the ground that until his work, entitled "Zaraso i Chakoti" (Infections and Phthisis), which at present exists only in Russian, is translated in some language which the Spanish physicians read it would be useless for him to go such a distance, as his proposed consultees cannot be fully acquainted with the principles on which his treatment is based. He therefore foregoes a very large fee on a somewhat novel ground.

Dr. C. Theodore Williams, in discussing the (Results of the Treatment of Pulmonary Consumption by Residence at High Altitudes,) as exemplfied by an analysis of 141 cases, before the Royal Medical and Chirurgical Society of London, May 8th, 1888, has arrived at the following conclusions.

1. Prolonged residence at high altitudes produced great improvement in

the majority of consumptive patients, and complete arrest of the disease in a considerable proportion, such arrest being in more or less degree permanent.

2. That in order to secure these advantages, patients must be free from pyrexia and all acute symptoms, and must possess sufficient lung surface to adequately carry on the process of respiration in the rarefied atmosphere.

3. That the influence of the climate seemed to promote a change in the lungs, either of curative or destructive character and to oppose quiescence.

4. That residence at high altitudes caused enlargement of the thorax, hypertrophy of the healthy lung tissue and development of pulmonary emphysema around the tubercular lesions, and that this expansion of the chest was accompanied by diminution of the pulse and respiration rate.

5. That it was probable that the arrest of consumptive disease was partly owing to the pressure exercised on the tubercular masses by the increased bulk of the surrounding tissue.

6. That the above local changes were accompanied by general improvement, shown in the cessation of all symptoms, and the gain of weight, color, and of muscular, respiratory and circulatory power.

7. That consumptives of both sexes benefitted equally by mountain residence, but that the age of the patient exercised considerable influence on the result.

8. That the high altitude treatment seemed to be specially adapted in cases where heredity and family predisposition were present.

9. That the climate was useful in cases of hæmorrhagic phthisis, and that hæmoptysis was of rare occurrence at the mountain stations.

10. That mountain climates were most effective in arresting phthisis when the disease was of recent date, but they were also beneficial in cases of longer standing.

11. That the special effects of high altitude residence on the healthy and sick were common to all mountain ranges of elevations of from 5,000 feet and upwards.

12. That to ensure the full advantages of high altitude residence, a period of at least six months was necessary in the majority of consumptives. In cases of long standing and extensive lesions, one or two years were often requisite to produce arrest of the disease.

13. That, in addition to the above examples, mountain climate was beneficial in (1) cases of imperfect thoracic and pulmonary developments; (2) in chronic pneumonia without bronchiectasis; (3) chronic pleurisy where the lung did not expand after the removal of the fluid; (4) spasmodic asthma without much emphysema; (5) in anæmia.

14. That they were contra-indicated in the following conditions; (1) phthisis with double cavities, with or without pyrexia; (2) cases of phthisis where the pulmonary area at low levels hardly sufficed for respiratory purposes; (3) catarrhal phthisis; erethric phthisis, or phthisis where there was great irritability of the nervous system; (5) emphysema; (6) chronic bronchitis and bronchiectasis; (7) diseases of the heart and greater vessels, (8) affections of the brain and spinal cord, and conditions of hyper-sensibility of the nervous system, and (9) where the patients were of advanced age, and where they were too feeble to take exercise.—*British Medical Journal*, May 1st, 1888.

Premonitory Symptoms of Phthisis.—The *Medical Register*, March 17th, gives the following extract from a recent work of M. Rene Serrand, who has made a special study of the first symptoms of phthisis: In patients doomed to pulmonary phthisis there always exist very clear and decided pharyngo-laryngeal signs, which precede for some time pulmonary symptoms. These signs are three in number: 1. Pharyngeal anæmia. The pharynx is pale, white, discolored, in place of having its normal color. 2. Impaired action of the inferior vocal chords through atony of the constrictors. 3. Local congestion of the arytenoid and inter-arytenoid mucous membrane, manifesting itself in swelling and a cherry-red inflammation of that locality. These three signs may exist simultaneously or alone. The presence of even one is a

strong indication of approaching pulmonary tuberculosis; whenever a physician finds all three present, this prognosis is certain. Pharyngeal anæmia, impairment of the vocal chords, and congestion of the arytenoid region, symptoms which have nothing in common with laryngeal phthisis, are the heralds of pulmonary consumption. The physician who knows how to read the larynx of his patient can avoid a great many missteps, for, warned of the danger ahead, he can institute a prophylactic treatment, and arrest phthisis in its first stage.

Virchow on the Distomum Hæmatobium.—Professor Virchow, ever active in many and varied pursuits, having recently been up the Nile, has just returned to Cairo and devoted his immense influence towards stimulating the Egyptian authorities to a systematic examination into the *habitat* of the bilharzia hæmatobia, and in the manner in which this parasite makes its entry into the human body. There is no doubt that this distomum is abundant in Egypt, but what remains to be ascertained are the localities where it undergoes its development and attains its maturity. Dr. Fouquet, of Cairo, has had great success in treating the disease with the fluid extract of male fern, which is surprising, as it has usually been considered not amenable to treatment, when once the parasite had established itself in the urinary tracts.

Impure Antipyrin.—The extraordinary demand for antipyrin is very much in excess of the supply, and great pressure is put upon the manufacturers to increase the amount of the manufactured article in the market. The consequence has been that due care has not been shown in the purification of the drug, a certain proportion of benzine having been detected in samples submitted to analysis, according to Dr. Dujardin-Beaumetz. This impurity may account for some of the toxic symptoms which have been reported, such as cutaneous eruptions, gastric troubles, and even grave cerebral symptoms, more particularly in the aged.—*Brit. Med. Jour.*

Medical Experts.—A Sound View.—Mr. Clark Bell, in the *Medico-Legal Journal*, makes the following clear-headed comments on this subject. They are in accord with the demands and truth of science, and especially with the views of all experienced alienists, led by the great Esquirol, who long ago said we must live with the insane to understand them:

We feel that there is a precipitious impulse in young ambition towards the notoriety of appearing as an "expert" in some legal case, where the disposal of human life or fortune may hang upon our very lips. Nothing could be more unfortunate for the moral welfare, and professional standing of a man, than that he should allow himself, on the strength of mere average information, to be induced to deliver a medical opinion in a case requiring special research, observation and clinical experience. It is so manifestly wrong, that to be the purveyor of "expert testimony" ought rather to be shunned than sought by young practitioners.

Doubtless, there are honest men of meagre attainments, who are quite deceived as to their own ability to give expert testimony. This is deplorable, but a fault which it is hard to correct, though the best safeguards of ignorance in medical jurisprudence, lie to a certain extent within the reach of all. * * *

He seeks, for example, to settle the question of mental responsibility. In such a case, let him beware of the jurisprudence that is to offset his medicine. If he dread rebuke and ignominy; above all, if he be a conscientious man, let him never presume to know more than he does know. A shrewd cross-question will certainly undo him, and he runs a risk of fatal inaccuracy which may involve tremendous results.—*Alienist and Neurologist.*

Dr. Charles McBurney, has been appointed Visiting Surgeon to Roosevelt Hospital, New York, in place of Dr. Sands, recently resigned. Dr. R. J. Hall has been appointed Attending Surgeon to Bellevue Hospital, and Dr. George L. Peabody Attending Physician.

Medical Items.

The Ohio State Medical Society will meet in Columbus June 13.

Don't write your prescriptions for solanin on too liberal a scale. It costs two dollars a gramme.

The number of births in Paris in a week averages 1,065, of which 779 are legitimate, and 286 illegitimate.

M. Pasteur has been awarded the great "world's prize" of $3,400 by the Italian Academy of Science.

A man has been condemned at Carlsruhe for inducing hypnotism in a young man, 19 years of age. The court regarded it as a case of assault.

The much advertised quack medicine, Vita Nuova, according to the *Boston Journal of Health*, is nothing probably but a native port.

Dr. George J. Preston, of this city, has sailed for Europe to spend a few months in London and Paris in the study of diseases of the nervous system.

The best anæsthetic in obstetrical practice, according to Dr. Stephens, of Brighton, is a mixture of equal parts of alcohol and chloroform, to which may be added, if desired, a little cologne water.

The Woman's Medical College of Baltimore has changed its quarters from the building on North Eutaw Street, to a more commodious house on the corner of Druid Hill Avenue and Hoffman Street.

Dr. H. P. C. Wilson sails on July 7th, for Europe. He will attend as a member, the annual meeting of the British Medical Association at Glasgow, and later will be in Paris with Apostoli. He has promised letters to the JOURNAL from both places.

The water-supply of growing cities is the subject for which a prize is offered for International competition in 1888. It is one of a series of annual prizes offered by the King of the Belgians, the value of which is 25,000 francs for each award. The essays of those desiring to compete must be addressed to the Minister of Agriculture, Brussels, before January 1, 1893.

The *British Medical Journal* mentions as an intance of the devotion of medical men to humanity the case of Dr. Landon, a surgeon in the British army. Mortally wounded himself, and with the agonies of death closing in, he heard a wounded soldier shrieking from sufferings. Forgetful of self, he crept to where the man lay and gave him a hypodermic injection of morphine to relieve his distress, and giving it, died.

Dr. G. W. Tinkham, of Weymouth, writes that he prescribed a mixture of benzoic acid, ʒij.; borax, ʒiij.; in water, ℥xij., as recommended by Dr. Chunn, for irritable bladder, but was informed by his druggist that the benzoic acid would not dissolve in that quantity of water. Benzoic acid is soluble in 500 parts of cold water, and in 15 parts of boiling water, but its solubility is largely increased by the addition of one and a half part of borax.

The chair of surgery in the Medical College of the State of South Carolina has been divided to enable Professor R. A. Kinloch to devote his entire attention to clinical surgery. Dr. Manning Simons has been appointed to the chair of didactic surgery. Dr. P. Gourdin De Saussure has been appointed to fill the chair of obstetrics and gynæcology made vacant by the death of Dr. J. Ford Prioleau, whose position as dean has been filled by the appointment of Kinloch.

Dr. W. E. A. Aiken, for many years Professor of Chemistry in the University of Maryland, and well-known to many of the readers of this JOURNAL died suddenly in this city on May 31st. Prof. Aiken was born in New York on February 10, 1807, and was consequently in his 82nd year. He enjoyed excellent health up to the time of his death which is supposed to have resulted from heart disease. A fuller notice of the life of this distinguished and venerated man will appear in a subsequent issue of this JOURNAL.

Stoppage of the natural flow of urine, says Ultzmann, may be caused by :

1. Occlusion of the smaller urinary tubes, as in cholera and any of the renal diseases.
2. By occlusion, twists, and turns in the urethra,

Ultzmann records the case of a man, æt. 43 years, with calculcus of the kidney, who suddenly developed anuria, which caused death in two weeks. The autopsy showed a cyst of the left kidney as large as a goose-egg, with obliteration of the ureter, and on the right side an enlarged kidney, with three small stones filling the ureter.

2. By a tumor of the bladder.—*Internat klin. Rundschau*, Nos. 7-17, 1887.

The following physicians were licensed by the Medical Examining Board of Virginia, April 20 1888. Drs. E. W. Baxter, E. C. Stuart, W. R. Arnold, J. T. Doler, J. T. Hume, R. R. Robertson and I. S. Smith of the College of Physicians and Surgeons; and Drs. J. H. Ayers, W. H. Feddeman, A. M. Dupuy McCormick, J. B. Moore, M. R. Drewry, H. J. Edminds, F. V. Fowlkes, T. S. Gibson, C. R. Kernan, L. B. Moore, and R. L. Randolph, of the University of Maryland. 33 from each school, or a total of 66 have appeared before the Board since January 1, 1885, and of these 8 from the University of Maryland and 10 from the College of Physicians and Surgeons were rejected.

Original Articles.

A FEW THOUGHTS ON ATRESIA OF THE VULVA AND VAGINA, WITH RELATION OF CASES.*

BY G. LANE TANEYHILL, A.M., M.D., OF BALTIMORE.

From the Greek *atretos*, "without an opening" we have atresia, and, if we desired to designate, in one word, the atresia of the vagina we would combine the Greek *kulpus*, Latin *colpo* with atresia and have *colpatresia*, meaning imperforation of the vagina.

I think it is generally understood that cohesion of the surfaces of the vaginal tube constitutes *atresia vaginæ*, this tube may be subject, of course, to closure by imperforation of the hymen, in fact it is to cases connected with a faulty development of the hymen, as Meigs says, that we *generally* apply the terms imperforation, obturation and occlusion.

While we know that any portion of the genital canal may be occluded, yet the opinion is expressed by most authors that atresia of the hymen, usually denominated "imperforate hymen," is of more frequent occurrence than any other variety of vulvar stenosis.

In speaking of atresia this evening, I will confine my few remarks to vulvar and vaginal atresia, and leave to those who have had vast experience "higher up," to refer to atresia of the *uterus*, if they so elect. Professor Edward W. Jenks in the September No. 1880, *Chicago Medical Journal and Examiner*, quoting Courtey and Puech recognizes three varieties of congenital vaginal atresia; *simple*, when the vagina alone is involved· *complicated* when there is atresia of both vagina and the neck of the uterus, and *complex* when the vagina being double, one of the canals is imperforate; the last being so rare that Rokitansky observed only three in sixty-two cases of congenital vaginal atresia: he uses the word atresia in a "conventional sense," applying it to "a condition of the vagina where even the principal part of that passage is perforate, if only a little of it be imperforate."

If we follow the usual division as given by authors we would say that vaginal atresia is either *congenital* or *accidental*, and each form may be complete or incomplete; arrested embryonic development being the *cause* of congenital atresia, and mechanical injuries or ulceration consequent upon diseases such as syphilis, variola, typhoid fever, diphtheria and the like, being the cause of the cicatrization in accidental vaginal atresia. The stenosis following diseases, according to Spiegelberg, is generally partial. Drs. Lusk, Taylor, and other authors enumerate protracted labors, instruments, caustics, and the improper performance of obstetrical operations as the main causes of complete vaginal atresias. We all know also, that cohesive inflammation may supervene after childbirth, or from ulceration extending from the os uteri, which invading the vaginal cervix of the womb, may descend, affecting the walls of the vagina. I knew of a case of atresia occurring in a lady consequent upon an accidental injury to the labia, by a fall. Œdema of the vulva, cancer and polypi in rare cases, have been known to produce atresia; other causes are, vaginismus, rentention of urine, rectocele, prolapse, cystocele, and cystic degeneration of the vaginal walls.

The retention of the menstrual fluids at a time when they should come away, constitutes the main *symptom* of atresia in the unimpregnated woman, and according to Lusk mechanical obstruction to delivery is the most prominent symptom of atresia *during parturition*. In a female unable to perform the sexual act we have good reason to suspect some form of atresia. A thorough digital and instrumental exploration will generally clear up any obscure symptoms and enable a surgeon to render a satisfactory diagnosis. I have very little sympathy with that female sentimentality, "false modesty," that demurs to the recommendation of an intelligent honest phy-

*Read before the Gynæcological and Obstetrical Society of Baltimore May 8, 1888.

sician. In my slight experience I am confident, in one of my cases, to be related, I saved the life of a pining virgin, by operative procedure, although it took me two weeks to convince (persuade) the aunt of the lady, who was her guardian, that a physical examination was absolutely necessary. In fact it may be a question of shirking his moral responsibility for a physician to allow an undefined case of this nature to go on into emaciation and perhaps death by exhaustion or blood-poisoning. Then, too, there may be "questions of the happiness or misery to the individuals and families involved, at least if marriage is contracted when the woman has an abnormality about the sexual organs." I hold that it devolves upon *the physician*, when he is consulted by the fond mother of a girl who has never menstruated, yet who proposes to marry, to insist on a *physical examination* before he expresses an opinion whether said daughter should marry or not, or decide that she is competent to become a mother. Here come, in, as we know, delicate questions in medical jurisprudence. Aye, the divorce mill would have less to grind did mothers and physicians do their whole duty to and for those pitiable sterile ones who blindly rush into the arena as brides; and there would be more happiness and less of upbraiding in matrimonial life if the mothers of girls were to pay more attention to their proper physical development, and exert themselves less in their machinations of match making.

But I will not pursue this line of thought further, lest some of you might be tempted to say that I am outside of the vaginal tract.

It is evident that each case of atresia would necessitate a *treatment* suitable to itself, the individual pathological conditions dictating the mode of procedure.

A limited personal experience will prevent me from asserting what should or should not be done in complicated or complex cases, for during a general practice of twenty-three years in which I have seen Drs. Taylor and Lusk operate, I have only had three cases and those were all of the simple variety. In these days of antiseptic agents, the treatment, which in nearly all cases is necessarily surgical, is carried on with less risk than many years ago, although "care, caution, and skill" are required in operating even for an imperforate hymen.

If I had a case now of retained menstrual blood in consequence of an atresia I would follow Dr. Jenk's advice to *aspirate* before I incised the obstructing membrane.

Septicemia and inflammation will most probably be prevented by injections of warm water, after free incision.

Authors differ regarding the *time* at which surgical procedure should be instituted; the exigency of the case would seem to dictate at what time one should operate. One author suggests that "where there is no accumulation and the operation is chiefly for the purpose of relieving a deformity, then the time of greatest calm of the generative organs should be selected, about 10 or 12 days after the menstrual date; but the same author would operate *just prior* to the menstrual date in cases of imprisoned menstrual fluid as the patency of the newly opened canal is thus better insured."

Congenital atresia, as the rudimentary canal serves as a guide, can be readily relieved by "tearing" with the finger, while the acquired, accidental forms require the assistance of the scissors, and, sometimes "cutting and tearing are requisite."

I have not read of any case in which the insertion of the trocar by way of the *rectum*, with a view of relieving the fluid, has been resorted to during the latter years of gynæcological surgery. In the *American Journal of Obstetrics*, July, 1880, reference is made to a discussion in the New York Obstetrical Society regarding the *danger* resulting from the removal of the imprisoned menstrual fluid. Lusk and Skene considered inflammation as the most probable source of danger, while Mundé thought that regurgitation through the Fallopian tubes and sepsis would be more apt to supervene in fatal cases.

If the menstrual retention depend only on an *imperforate hymen*, Grailv

Hewit suggests that a small opening in the hymen be made by a bistoury, cutting obliquely in the obstructing membrane, giving it a valvular character, thus evacuating the fluid slowly, and allowing the womb to return to its proper dimensions; however, he advises free incision if by any chance air enter and the fluid become decomposed. *Per contra* Dr. E. W. Jenks from whom I have so freely quoted, insisted that the evacuation should never be through a small orifice (except in aspiration) but by free opening, and the vagina and uterus thoroughly washed out with warm water, this he considers the best means to avert or cure septicemia or inflammation. Prof. Emmett, also, advocates free incision.

In my own cases I have had no fatal results and I have in all of them made free incisions; but, it is fair to say that only two of these had fluid to be evacuated, and only about two ounces from each.

An important afterstep in any operation of this kind is the absolute necessity of keeping the vaginal tube perforate by means of antiseptic plugs, tents, or tampon of lint so large as to distend the canal and prevent "healing by first intention."

As I have not operated on any cases of accidental vaginal atresia I will not attempt to lay down the indications for treatment in those cases of vaginal stenosis. With such well conducted charities and hospitals as we now have, compared with the meagre accommodations of 1869 in which year I first operated, I would consider myself "culpable if I ignored existing facts and opportunities by exposing my patient to risks which the advanced science of the present day enables one to greatly lessen."

Cases. In the case of the pining virgin of 1869, on Aisquith street, this city, it transpired that she had been treated for the usual amenorrhœa by three different physicians, for nearly two years; she was 17 years old, weighed 96 pounds, was pale, nervous and irritable. It was asserted by her aunt and self that no blood had ever passed from her vagina, breasts were moderately well developed as also the bony structure; when 13 years old she had had both measles and varioloid, after which her aunt had observed a mucous discharge from the vulva but regarded it as a precursor of the coming menstruation. As well as she could inform me she had experienced the *Molimen menstrual* for at least two years. I placed her in the lithotomy position, her aunt bravely supporting (holding apart) the knees, all the parts were apparently normally developed; the hymen, of a crescentic form, was plainly discerned within a short distance of the posterior labial commisure. Thinking that I would only have an imperforate hymen to deal with I was a little surprised to find that membrane perforate, but a rectal examination still made me confident that there was imprisoned fluid in the vagina, and after cautiously nicking the membrane with a blunt bistoiry and tearing it downwards I was enabled to insert my finger about ¾ of an inch higher (deeper) at which junction I encountered a fibrous septum presenting considerable degree of resistance. It occurred to me that after all perhaps I was meeting a case of "short vagina" with a uterus not fully developed. However, with an exploring needle having a deep groove, I had the satisfaction of bringing away several drops of the characteristic tarry fluid, and without hesitation I incised the obstructing membrane, and although the lady fainted as I did so, about two ounces of tar-like syrup fluid, consisting of blood and mucus poured out. After administering a large dose of brandy and washing out the vagina with hot water and permanganate of potash, and re-introducing the speculum a normal well developed uterus was observed, from which exuded some glairy mucus. She was kept in bed for two weeks, the vagina dilated with an improvised tampon made of oiled silk and stuffed with cotton and smeared over with carbolized oil; weak permanganate injections twice a day prevented any absorption of poison, and kept down inflammation. Quinine and opium sustained and

quieted the little woman who became marvelously cheerful and shared my joy at the termination of the operation. Citrate of iron and quinine in two grain doses three times a day were administered for two weeks, and as the significant pains in the back and loins were being experienced I ventured to encourage the efforts of the womb by giving one pill of aloes and myrrh three times a day, with the happy result of establishing a normal menstrual hæmorrhage on the twenty-second day after the operation. The tampons were scrupulously used for several months, I dont know how long. Where previously she had but sympathy, now she excited admiration and compliments from her friends and acquaintances, her weight having increased from 96 to 126 in the following year. The male sex was not slow to observe the restored health and buoyancy of the restored friend; she married four years subsequently, and I am happy to say is the mother of four interesting children.

I am aware that some may denominate this a case of "stricture of the vagina" of a congenital form; nevertheless there was the occlusion, there was the imprisoned fluid—the operation released it, and now we have a healthy mother of four healthy children.

In a case of vulvar atresia due to imperforate hymen I was consulted by an anxious mother who being a rather painstaking lady had taken the trouble to make a physical examination of her own daughter. The young lady was 16 years old, of rather dark complexion and light weight. She had been treated for "worms," and for "neuralgia of the bowels." As I was treating a case of chorea in the neighborhood I was informed that I was called in to stop this young ladies "*jerkings*" *which came on once a month.* She acknowledged that her pains were "not so much in her bowels as some other regions," although on making pressure over the hypogastric region she did not seem to experience any considerable suffering. The development of the breasts, and other indications, convinced me that she had arrived at the age of puberty. I informed her that it would be a dangerous step for her to take if she eventually married the gentleman who was waiting on her, and in the mean time her menses did not appear; that her mother having examined her was of the opinion that she "was not all right." After making a careful calculation of the supposed time for the menses to appear, I administered chloroform, placed her in the lithotomy position, her mother holding the knees open: the physical examination revealed *an imperforate hymen* in the form of a slightly tense elastic membrane, which, in a saculated form protruded sufficiently to have convinced one, that, had she been a horse-back rider she would certainly have ruptured her own hymen. The same grooved needle was inserted and dark thick blood and mucus brought out.

The sack was punctured and as soon as all the fluid escaped, (about 2 ounces), the opening was dilated by tearing,—the vagina was syringed out with warm carbolized water; oiled roll of lint inserted, absorbent cotton applied with a napkin and abdominal bandage, and a strong anodyne administered. The next day a speculum examination revealed a medium sized virgin uterus. Patient was kept in bed for three weeks—dressings changed twice a day with syringing at same time. No untoward symptoms supervened, and at the end of one month from the operation normal menstrual hæmorrhage, *for the first time* exhibited itself. The vaginal tampon was continued for three months and an examination at the end of that time showed the cicatrices healed and vaginal walls not contracted; the lady had gained in weight and appeared to be, and asserted herself to be "well in every particular just like any other normal girl."

In several other cases of imperforate hymen, in which I have operated or assisted, equally good results ensued, on one which only two months ago our fellow member Dr. H. P. C. Wilson operated for me, in which latter case the lady has menstruated a normal amount of blood within three weeks, however I am not aware, that there was any imprisoned blood at the time of the opera-

tion. Dr. Wilson could give a more correct account of this operation than myself, I regret his absence.

As I have not kept notes of any other cases I will not attempt to narrate them at this meeting, but close with the account of an incident that, to me, was more amusing than instructive. A few years since a clever clergyman who had been married the night before came into my office the following morning, a deplorable specimen of disappointed ambition. After closing the private door and drawing the curtain he stood before me, with contorted countenance, puckered penis and bleeding bridle! He alleged that he had been fishing all night and found nothing. I ventured to suggest to him that his ignorance of the ways of the world might probably account for his unsuccessful attempts on the previous night;—well if ignorance is bliss, he would, in this case, prefer to have a little more of wisdom of the world. When informed that it was very probable that his bride had a tense resisting hymen,—not very likely an atresia of the vagina, he requested me to "open up the way" to his happiness. I dressed his frenum and consented to, at least, make a physical examination, if the madam consented. When his own afflicted member was healed he returned to say that his wife was one of those who lecture on temperance, believed in woman's rights, and had just informed him that she would not allow any man, except her husband, to come around her. This placed him in a greater quandary than ever, but I recommended him to pear his right index finger nail to *a point*, and, at a favorable opportunity, thrust it in the vaginal orifice and probably he would be able to effect the object he desired. He went,—he thrust, and, she conceived;—and I delivered her of a fine healthy boy just nine months after that last interview;—this is the only case I have treated by proxy.

Dr. William J. Moore, Norfolk's oldest physician, and one of the most respected citizens, died at his residence in that city on May 19th.

CHLOROFORM IN OBSTETRICS.*

BY P. C. WILLIAMS, M.D., BALTIMORE.

Ten years ago I presented a paper to the Medical and Chirurgical Faculty on the use of chloroform in obstetrics in which I referred to twenty years experience in its use.

Permit me now to reiterate the opinion then expressed in favor of the use of chloroform. The additional experience of the past ten years not only fully confirms the opinion expressed in the paper referred to, but induces me to use chloroform with increasing confidence and frequency. I think that physicians generally are not sufficiently alive to the utility of chloroform in obstetrics.

We are too prone to look upon the "pains of labor" as a natural, physiological process with which we ought not to interfere. We often fail to appreciate the pernicious effects of long-continued pain. Pain may, and does forewarn of danger and disease, but it also rapidly exhausts nerve force; and, if permitted to continue too long, may lead to disastrous results.

Experience proves what serious injury is often inflicted upon a parturient woman by the pains of a tedious labor. The experience of the past thirty years in obstetrical practice has led me to the decided conviction that we fall short of the proper discharge of our professional duty if we fail to use all *proper means* for relieving the pains of child-birth—provided that such means do not hazard the safety of mother or child. This is especially true in reference to primiparæ.

In these, labor is usually, long and severe. In these, the "cervix uteri" is firm and unyielding; the vagina is small, and of difficult distensibility; and the perineum is rigid and inelastic.

Every thing conspires to produce delay and suffering. In addition to this, the moral experience the woman is about to undergo, naturally begets a spirit of alarm and apprehension that inflicts serious shock upon her nervous system.

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*Read before the Gynæcological and Obstetrical Society of Baltimore, May 8th, 1888.

Any agent that can overcome, or mitigate such a formidable array of difficulties must confer an inestimable blessing upon "all women in the perils of child-birth." This I believe chloroform can do.

It not only removes the apprehension, and relieves the suffering, but it also shortens the labor, and facilitates the convalescence by preserving the strength that would otherwise be exhausted by the duration of the labor and the severity of the "pains."

I further believe that chloroform confers all these benefits without any danger to mother or child.

During the past thirty years, I have used chloroform with increasing frequency; until now, I administer it in nearly all the cases that come under my care, and yet I have never seen any serious consequences result from its use.

In no case have I seen any disagreeable effects upon the mother, except occasional attacks of vomiting. This effect even is rare; indeed I have seen patients that cannot take chloroform under ordinary circumstances without extreme discomfort, and yet experience no difficulty when used during labor.

The effect upon the mother is prompt, decided and agreeable. Upon the child I believe chloroform is equally free from danger.

Occasionally I have seen children born under strong anæsthetic influence of the chloroform but they always rally from it in a very little while. I have never seen a child fatally asphyxiated by chloroform in a case of confinement.

This immunity from danger to mother and child is very marked. Moreover the effects are very agreeable upon the mother. So much so, that we never encounter the slightest opposition from a women who has previously been brought under its influence.

I could cite many instances of women who were greatly opposed to its use before it had been administered to them, but who would clamor for it in all subsequent cases.

Most women bear the "pains of labor" with great fortitude at first—but after a while the "pains" exhaust their strength, and they become nervous and impatient.

Under these circumstances I think chloroform ought to be administered, without reference to the stage of labor—it quiets the impatience and re-establishes the strength of the patient.

In these cases where the labor promises to be long and tedious, I am in the habit of giving a full dose of chloral (say 30 or 40 grains) either by the stomach or by the rectum. This will relieve the patient and permit the labor to go on quietly until the time arrives when you are compelled to remain by the bed side and when you can administer the chloroform and continue its use until the "labor" is completed.

In the second place—I think chloroform is especially indicated when the "os uteri" remains firm and unyielding. This is one of the most common causes of "tedious" labors. All of us have doubtless had cases in which the "os" dilates about an inch or an inch and a half, and then remains stationary notwithstanding violent and exhaustive pains.

In former times this condition was treated by blood-letting, by tartar-emetic or by belladonna. We all know how unsatisfactory such treatment was! It is wonderful how promptly and efficiently chloroform acts under these circumstances.

In former times I have often waited hour after hour, and tried the old remedies in vain, until I would give chloroform, and then be amazed at at the rapid dilatation of the "os" and the speedy termination of the labor, and would wonder why I had not given the chloroform long before. This experience has taught me to resort to the early use of chloroform and not permit my patient to become exhausted by ineffectual efforts to dilate the "os."

I have recently had a most satisfactory proof of the happy result of such treatment.

On the night of March 24, I was called to see a primipara that I had been engaged to attend.

I found that she had gone quietly to sleep and after a few hours was aroused

by the rupture of the membranes, and the escape of the amniotic fluid.

Examination revealed a very firm and contracted "os" into which I had difficulty in introducing the end of my finger. I waited for some time but no progress was made in the dilatation of the "os." As the pains were neither very frequent or severe, I went home, after instructing the patient to send for me if the pains became active. Hearing nothing from her, and being busy all the morning I did not call to see her until about 1 o'clock the next day—viz: about twelve hours from the time I had left her the previous night.

I found the pains becoming much more frequent and severe, but no progress was made in the dilatation of the "cervix." The patient being of a nervous temperament, and becoming anxious and fretful I ordered an enema of 30 grains of chloral in half a pint of warm milk. About 4 o'clock I saw her again, and found her sleeping under the chloral, and also discovered that the cervix was softening, although very little progress was made in the dilatation. I ordered the chloral enema to be repeated.

At 8 o'clock P. M., viz.. four hours later, I called and found the condition of the "os" much more satisfactory—dilatation was progressing and the head of the child was beginning fairly to engage. I then determined to remain with my patient. The effects of the chloral began to wear off, and I substituted for it the administration of chloroform. About 10 o'clock P. M. finding that the perineum was soft and distensible, and the pains very active, but very little progress made in the descent of the head, I decided to put my patient more fully under the chloroform, and to apply the forceps. With these the labor was promptly terminated without the slightest injury to mother or child. This case is a good illustration of the beneficial effects of the combined use of chloral and chloroform in overcoming the rigidity of the "os."

In the third place we often find that the "os" dilates without delay, and the head of the child easily passes into the cavity of the pelvis, but it is there retained indefinitely by a rigid, inelastic perineum.

It is wonderful how long this condition may persist. You are afraid to leave your patient for fear of a sudden yielding of the perinuem, and yet you wait in the vain expectation of seeing it give way.

Under these circumstances administer chloroform and you may soon have the gratification of seeing the rigidity overcome and the labor speedily terminated.

In some cases, however, the result is not so prompt as here described—the rigidity persists in spite of the chloroform. In such cases the chloroform is, nevertheless, of inestimable benefit.

Its anæsthetic effects gives you opportunity of using mechanical means of overcoming the obstacle. The introduction of two or more fingers into the vagina will enable you to make constant and firm pressure upon the perineum, which soon compels it to yield.

Pressure sufficient to accomplish this, could not be made without the chloroform because the pain would be insupportable. With the chloroform requisite pressure can be made without pain or difficulty.

In the fourth place; chloroform is especially useful in all obstetrical operations viz., in version, in the application of the forceps, in the extraction of adherent placenta—or in any other operation that may become necessary.

A woman who has never experienced the comfort and benefit of their use, has a dread of the forceps. To such a woman chloroform is an inestimable born. You put the women under the influence of the chloroform, and, without exciting her fears by telling her your intentions, you apply the forceps, and deliver the child, and she arouses from her peaceful sleep to find her pains terminated and her labor ended.

In the fifth place: chloroform is exceedingly useful in "version."

Under its influence you not only accomplish the version without pain to the mother, but you also greatly facilitate the operation by the passive attitude of the patient and by the muscular relaxation produced by the chloroform. I be-

lieve that no physician who has performed "version" with the assistance of chloroform, would be willing to dispense with it in any subsequent operation.

In my own experience the use of chloroform has rendered "version" a simple operation in the great majority of cases, and enables us to accomplish it without injury to mother or child.

I might speak of the use of chloroform in other cases, but enough has been said to indicate the principle upon which I advocate its use.

I use it without hesitation and with great advantage in every case of tedious or painful labor, and in all kinds of operative procedures.

The paramount purpose in view is to reduce the pain of child-birth to the lowest degree consistent with the safety of the mother and the child.

This brings me to consider the question. "Is it safe to administer chloroform to obstetrical patients suffering from organic disease of the heart.

My own experience has satisfied me that it is perfectly safe to do so.

I believe that the heart of a parturient woman is subjected to much less strain when she is under the influence of chloroform. I might give many illustrations of this statement. I will mention only one. Mrs. McN., is suffering aortic "insufficiency." She has had six children, three of whom were born before she came under my care.

I have attended her during the birth of the last three. In her fourth confinement (the first under my care) I was afraid to administer chloroform, because I then shared the common professional opinion that chloroform ought not to be given when there existed organic disease of the heart. In this confinement my patient fainted several times, and filled me with serious alarm for her safety. I then discovered that she had had similar attacks of fainting in her previous confinements.

I attributed these attacks partly to the exhaustion incident to her labors (which were long and tedious) and partly to the fear upon her part that these attacks of fainting might be fatal. In her fifth and sixth confinements I acted upon this opinion, and I administered chloroform with most gratifying results.

In both cases labor was completed without fainting and her convalescences was entirely satisfactory.

My experience in these cases satisfies me that patients laboring under organic disease of the heart will pass through their confinements with greater safety when chloroform is given.

There is only one other question to which I would like to call attention, viz.: Does chloroform predispose to post partum hæmorrhage? My own experience has taught me that it does not. The only dangerous post-partum hæmorrhages that have occurred in my practice took place *before* I began to use chloroform.

I have had four cases of very formidable postpartum hæmorrhage.

These cases were all relieved promptly by the hypodermic use of ergot. Guided by the experience of these cases —as reported to the Medical and Chirurgical Faculty some years ago—and acting in deference to the apprehension of many able practitioners I have adopted the rule of giving ergot before I administer chloroform. I believe that in these cases the ergot not only guards against hæmorrhage, but it also shortens the labor by preventing the chloroform from diminishing the force of the pains. I am fully aware that this practice brings me in conflict with the teaching of to-day.

But I believe nevertheless that it is good practice—my own practical experience has convinced me that is a sound and useful practice. There are undoubtedly cases in which chloroform does diminish the "pains" very decidedly —so much so as materially to detain the progress of delivery.

I have seen some very rare cases in which it puts an absolute check upon the pains. In these cases the use of ergot re-establishes the "pains" and terminates a labor that would otherwise become very tedious.

Under such circumstances we must either give ergot or stop the chloroform. Which shall we do? My own experience says give the ergot in order that

we may continue the chloroform. The question here arises at what stage of labor ought ergot to be given? I reply at *any stage of labor—provided* the "os" is either *dilated* or *dilatable.*

It would be manifestly unwise to give ergot while the "os" was rigid and undilatable. It would also be unwise to give ergot unless you have a reasonable prospect of an early termination of the labor.

Still more would it be hazardous to give ergot in any case of *mal-position.* Therefore if the position be normal—if the "os" be dilated or dilatable, and if there is a prospect of a reasonably early termination of the labor—my rule is to give ergot whenever I intend to push the use of chloroform to a decided effect. Where you intend simply to "dull the pains" it may be given or not according to the discretion of the physician. On the other hand I believe it is always safer to give the ergot when you intend to render the patient unconscious.

If we have given ergot under the restrictions above referred to and we find ourselves disappointed in the speedy termination of the labor—and the strength or *tonicity* of the pains threatens serious consequences to the child—we have a prompt method of ending labor by the use of the *forceps.*

REFLEX COUGH FROM PREGNANCY.*

BY GEORGE ERETY SHOEMAKER, OF PHILA.

All of us have seen cases where, in the early months of pregnancy, the stretching or pinching of nerve fibres in the uterus has been interpreted, through the medulla, in the muscles correlated in vomiting. All of us know of the reflex sensations, of the vasomotor and trophic changes, of the mental phenomena, and the occasional bowel complications of early pregnancy. Instead of these, in the case which is here related, the sensory impulse travelled from the uterine plexus through other sympathetic paths to the cord, to the medullary centre of the pneumogastric, and out along that and other nerves to the apparatus involved in a cough. The case was as follows:

Mrs. X., aged thirty, very muscular almost an Amazon in physique. General health apparently perfect. She has had two children, three miscarriages, and is now in the seventh month of her sixth pregnancy. It was in 1885 that she was first seen, while bleeding from a miscarriage at two months. She then stated that for several days before the uterus emptied itself, she had been troubled by a cough, without expectoration, coming on whenever she laid on her back. It ceased with the loss of the uterine contents.

Second attack.—Six months later, having been well in the interval, she was again pregnant at two months. No symptoms causing distress now appeared, except a cough, which, for two weeks, had troubled her as soon as she lay down at night, continuing at intervals until she arose, when it ceased almost entirely for the day. No pain, expectoration, or signs of respiratory irritation. A small dose of bromide and chloral, with hyoscyamus, taken in the evening, at once relieved the condition, which, however, returned immediately if the medicine was omitted. The tendency to cough subsided as pregnancy advanced, and the subsequent labor was normal.

A *third attack*, exactly similar, occurred when she again became two months pregnant, in January, 1888. The cough continued for two weeks before she applied for relief, and then was at once removed by the same treatment as before, a sedative given in the evening.

The patient has never had vomiting of pregnancy. Before coming under observation she had had one child and two miscarriages. History of cough with these was uncertain.

Examination showed no malposition or flexion of the uterus, and no laceration or erosion. The organ was freely movable, with no lateral tenderness; the ovaries normal.

The diagnosis then, in the three successive pregnancies under observation in

*Read before the Philadelphia County Medical Society, May 9th, 1888.

this patient, has been reflex cough from congestion, without other symptoms.

That large numbers of the symptoms which we daily see are reflex, it is easy to say, but it is by no means as easy to determine the paths of these reflexes; or to see why, in one case, one path should be taken, and in another case another. With the same stimulus to the same group of nerve filaments, the result will be interpreted in vastly different effects. So intricate, too, are the relations of different parts of the nervous system, and so diverse the influences which serve to switch off, as it were, the ongoing nerve impulse in this direction or in that; that in many instances we are obliged simply to record facts, and leave unexplained, because yet unknown, steps which lead to their development.

It will be remembered that the pneumogastric nerve has an extremely wide distribution and connection. That, besides going to the heart, and besides influencing the vasomoter system through the medullary vasomotor centre, it goes to the lungs and larynx, to the pharynx, and œsophagus; that it is connected with the external auditory canal, and with the meninges of the brain; that it goes to the stomach and intestines, to the liver and spleen, and, in short, to most of the abdominal viscera. Its connection with fibres of the sympathetic in the abdomen, enables it to receive impulses from organs such as the uterus, with which direct connection has not yet been fully traced.

While most cough is well known to be reflex from stimulus to pneumogastric fibres in the lungs or larynx, the same result may follow a stimulus applied almost anywhere in the distribution of this nerve.

The members of the Society need only be reminded of the cough which occasionally comes from putting a speculum in the external auditory canal, and of that which sometimes follows a disordered stomach; while the writer has now in mind a case of persistent cough, which has resisted treatment for years by the best specialist, and which is, in his judgement, probably due to irritation of the meningeal branch of the pneumogastric in the posterior cranial fossa.

Why the connection with the vomiting apparatus offers the easiest outgoing motor path from the medulla for the reflex impulses from the pregnant uterus, we do not know. The reflex sensory, trophic, and vasomotor paths in pregnancy seldom, if ever, lead to the stomach.

In the case which has been narrated, the easiest path from the medulla led to the respiratory system, probably as the result of idiosyncrasy alone.

Peculiar Effects from a Belladonna Plaster.—Dr. J. E. Horn reports, in the *Cincinnati Lancet-Clinic*, the following results from a belladonna plaster which was applied for the relief of the soreness resulting from a severe contusion: "It was on about thirty hours, and because of the burning it produced the patient removed it, and a vesicated spot the size of the plaster was visible. Two days later I was called in and given a good scolding. On looking at the arm I was actually frightened; the denuded surface was of a deep, angry red, and a scarlet hue extending from its edges in every direction. The arm was swollen all the skin would hold from shoulder to elbow, even extending to the fingers and hand, but not so great below the elbow. In fact, I had an extensive inflammation almost resembling erysipelas. The patient complained of dryness of the throat, and had double vision. The inflammation remained about one thing for three days, and then began to gradually subside. I have known belladonna plasters to irritate, but never saw anything like this, even when a vesicant had been applied."—*Journal of the American Medical Association.*

Nitroglycerine in Tinnitus Aurium.—Lautenbach has found nitroglycerine useful for the relief of ringing in the ears, associated with functional and organic heart disease, but not due to serious ear trouble. Marked benefit was usually obtained within a day or two, although occasionally the remedy was continued for two or three months before much improvement was noted.

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BALTIMORE, JUNE 9TH, 1888.

Editorial.

RUPTURED TUBAL PREGNANCY.—It is quite astonishing, to one who has kept the run of current medical literature during the past two decades, to observe the increasing frequency with which cases of ectopic pregnancy are observed and reported. At one time this condition was considered extremely rare, yet the frequency with which cases are now reported must modify this assumption to a large extent. The experience of one operator, Mr. Tait, furnishes details of seventy cases of tubal pregnancy, thus showing an exceptional and, perhaps, an unparalleled familiarity with this condition. An experience so large as Mr. Tait's affords unique examples of various conditions. In the *British Medical Journal* for May 12th, 1888, Mr. Tait reports a case in which ruptured tubal pregnancy occurred twice in the same patient. The history of the case is full of interest. In May, 1885, a lady, aged 25, was sent to Mr. Tait suffering from abdominal symptoms. She had been pregnant three months and a large ill-defined mass in the right side of the uterus led to the diagnosis of a ruptured tubal pregnancy. The abdomen was opened and the fœtus and tubes were removed. The patient made a rapid recovery. Eighteen months subsequent to this event this lady gave birth to a child at full term. Fifteen months later she again became pregnant and about the fourth month of gestation presented symptoms of ectopic pregnancy. Before intelligent relief could be given her by her attendants death took place from internal hæmorrhage. A *post-mortem* revealed an interstitial tubal pregnancy of the left side with rupture into the abdominal cavity, death resulting from loss of blood as previously surmised.

The facts of the case teach a number of lessons. The occurrence of tubal pregnancy of the right side and removal of same at the third month by laparotomy with rapid recovery illustrate the importance of prompt exploratory incision in these cases. Rupture of the right tube occurred at a sufficiently early period to favor the result witnessed. In tubal pregnancy the tube must burst sooner or later, and this event is not likely to take place later than the third month. But as rupture may occur in two directions, either into the peritoneal cavity or into the cavity of the broad ligament, Mr. Tait draws a distinction between the primary and secondary form, the first being almost necessarily fatal without prompt attention, whilst the second may be followed by a continuance of the development of the child until it reaches a viable period. The development of an interstitial pregnancy 33 months subsequent to a tubal pregnancy and in the left cornu of the uterus is a noteworthy circumstance in itself, but the occurrence of a normal pregnancy during this interval is still more striking. The most interesting point in this connection is the fact that this patient with an experience of tubal pregnancy failed to recognize the occurrence of the last ectopic gestation and lost her life in consequence of the fact that rupture took place when not looked for or in any way anticipated, thus showing that there were no facts calling her attention to the form of pregnancy until actual rupture occurred. This experience must teach the utter impossibility of a patient's know-

ing, in the vast majority of cases at least, of the existence of an ectopic gestation until actual rupture occurs. The history of these cases coincides likewise with the experience of the surgeon, for Mr. Tait admits that in his own unparalleled expersence he has met with only one case in which he was called upon to make an examination until rupture had actually occurred. Naturally Mr. Tait affirms that the diagnosis of tubal gestation is rarely possible until rupture has taken place and he holds a most sceptical attitude concerning the correctness of the diagnosis made in cases of tubal pregnancy before the period of rupture, and the cures supposed to be effected by puncture, electrolysis and medication.

The primary indication of tubal and of interstitial pregnancy, if we accept Mr. Tait's experience, and it is both large and varied, is the occurrence of rupture of the tube and its collateral symptoms. The indications for treatment point at once to laparotomy and prompt removal of fœtus, sac and blood clots. Admitting that tubal pregnancy can be accurately determined before the period of rupture the question as to treatment becomes a most important one. There are many surgeons who still advocate the older methods of puncture or electrolysis with a view to the destruction of the fœtus, acting on the assumption that it remains a foreign body which nature will sooner or later remove or care for after her own methods. On the contrary the tread of surgical opinion now begins to assert that primary laparotomy is the only rational and correct method of dealing with ectopic gestation the moment the condition is accurately determined. Mr. Tait and his followers do not hesitate to open the abdomen and remove the fœtus, tubes and sac the earliest moment the condition is made clear, rupture appearing as the first indication. The success of this method is too encouraging to admit of doubt as to its ultimate and universal adoption as the most rational way of treating extra-uterine gestation.

Publish Your Medical Observations.—How great must be the loss which our profession suffers from the neglect of its members to record their experiences and observations! There are certain physicians in every community who have formed early in life the habit of reducing to writing those incidents and thoughts which seem likely to be of interest and profit to others. Their names are often upon the programmes of our local societies, their writings crowd the pages of our medical journals. They are the objects of much unjust criticism. Members of the profession who never recorded anything, will tell you that they write "because they like to see their names in print," that "these *Journal Doctors* make a much greater figure in the medical world than their talents entitle them to," and so on. Now this is evidently unfair and shows want of thought on the part of those who make such statements.

That a physician whose only object in life is to make money, is a very poor physician, all except those to whom the description applies will freely admit. But, as far as the advance of medicine is concerned, he whose only object in life is to heal the individuals who place themselves under his care is little better. He comes into the profession finding it incomplete in its stores of knowledge, burdened with useless formulas and with methods of treatment not only imperfect but often pernicious; he passes through a long and busy life into the silence of the grave, leaving that professoin not one whit richer in its stores of knowledge, not one step nearer its true goal than when he entered it. We meet just such men every day—men whose minds are filled wieh rich stores of knowledge, whose practice is guided by wisdom based upon half century, perhaps, of experience such as will never again fall to the lot of man, yet as far as the profession of medicine is concerned they have made no effort to advance it, but have buried in the earth the treasures entrusted to them.

Upon the younger generation of physicians we would urge the importance of forming at the beginning of their career the habit of expressing in writing observations of value made in their dialy rounds. This habit is improving to him who forms it, in that it leads to more careful observation of his patients and more thorough study of their disease; and it is of inestimable value to the profession in that it adds interest to the local societies and journals, and secures a permanent record for much of importance which would otherwise be lost. The local journals are ever ready to receive and publish communications of value from even the youngest practition—the National Library with its Index Medicus places them even within reach of the reader.

Let us then delay no longer in writing out from notes or from memory those cases in our own practice which we remember so vividly, where old and tried remedies failed us, when text-books gave no light, where perhaps some old granny's remedy or chance suggestion proved of more value than all the lectures of our college career. Let us early form the habit of proving all things for ourselves, of sifting the wheat from the chaff and garnering the wheat not only in the storehouse of our memory but in the more secure storehouse of medical literature, where it shall remain for the use of all the generation of the future.

Miscellany.

The Transplantation of a Rabbit's Cornea.—Dr. Julian J. Chisolm has successfully performed this operation at the Presbyterian Eye and Ear Charity Hospital of Baltimore. The subject was a stout healthy man who had lost both eyes, from the caustic effects of lime. In each eye symblepharon had been complete, with the upper lid entirely adherent to the cornea. A year since the lids were successfully freed from their adhesions, but the corneæ were altogether fleshy, with no transparent point visible. The patient had good light perception, indications of a sound eye, except the opaque fleshy cornea. The instrument used was the trephine of Prof. Von Hipple, of Giezen. It is a circular knife $\frac{3}{16}$ of an inch in diameter, made to revolve rapidly by clock work. The eye of the patient was thoroughly cleansed by antiseptic applications, then brought fully under the influence of cocaine. The eye of a large healthy rabbit was similarly treated. By several applications of the trephine to the human cornea a circular disc was gradually and evenly cut sufficiently deep to permit all the surface layers to be removed down to the membrane of Descemet the lining serous layer of the anterior chamber of the eye. It needed a very skilful handling of the trephine to do this nice work and yet avoid cutting into the anterior chamber and letting out the aqueous fluid. As soon as the trephined plug was removed the patient expressed great delight from seeing more clearly than at any time since the accident, now many years ago. With the same trephine a circular plug of the entire thickness of the cornea of the healthy rabbit including the membrane of Descemet was removed. It had to be the duplicate in size of the piece removed from the man's eye. When adjusted this transparent piece of cornea accurately filled the hole made in the human cornea coming up quite to the outer surface level. It resembled closely the fitting of a pane of glass in a window frame. Should this piece of cornea remain transparent, of which there is every promise, the results will be a triumph in the progress of modern surgery. It will restore to usefulness a large class of persons now considered hopelessly blind and deservedly the subjects for charity.

A Medical College in Kansas.—There is talk of organizing a medical college at Topeka, in connection with the University of Kansas. The peculiarity of Kansas doctors just now, says one of them, is that they do not propagate their species—they have no machine for manufacturing pure-bred Kansas

doctors. Futhermore, we are told that Kansas doctors do not want such a machine, unless it is amply endowed by the State and made independent of students' fees.—*Medical Record.*

A New Method for Supplying the Galvanic Current for Medical Use.—Carpenter, of Cleveland, describes his method of procuring the galvanic current for office use, as follows:

The device to which we have the pleasure of calling the attention of the profession consists simply in that of using the current of the incandescent lighting system direct from the street-wire passing the door—Thompson-Houston or Edison. We have the wires of the former system placed in our office, and by means of a rheostat resistance sufficient to reduce the current to a minimum is interposed, then by the use of an ordinary switch-board, the current is increased or diminished according as resistance is cut in or out. A milliampère meter is made use of whereby the current is accurately measured while the patient is in the circuit.

The device is absolutely safe, as the entire voltage of the wire can be handled without the rheostat being used. My wire furnishes a very smooth continuous or galvanic current, with an electromotive force of 110 volts with a maximum strength of $\frac{11}{20}$ of an ampère, equal to about eighty Leclanché cells. This current is constant, does not vary in voltage, and is always ready, night or day, as the main line from which my connections are made is used for commercial purposes, and furnishes lighting for basements, dark shops, and rooms. This, I am informed, is the case in all large and in many small cities, so that little trouble will be met with in securing a wire with a day current. When a wire is once placed in our office, the task of caring for a battery of cells is at an end, and we have an apparatus that is at once always ready, reliable, economical, cleanly, and durable. The rapid introduction of the incandescent lighting system, together with the great increase in the use of this form of light, will place within the reach of very many physicians this current of electrolytic work.

The charge for the annual rental of the wire is $10, not including the cost of putting in, which, if the main line passes the door, should not exceed $5. This device, as will be seen, does away with cells entirely, as well as the time, trouble, and expense of keeping them in order, and I venture to express, as my opinion, that we have a current superior to any that it is possible to have generated from chemical action, besides economy of room, which is not a small item in cramped quarters.

A word regarding the danger from contact with the electric-light wire. The Thompson-Houston or the Edison incandescent system of an electromotive force of 110 volts, and of a strength of $\frac{11}{20}$ of an ampère, is harmless, and must not be confounded with the arc system of Brush and others, as the strength of the latter is six ampères, and of course dangerous and must never be used.—*Medical Record*, March 31, 1888.

The Blood in Diabetes.—Lépine has recorded a case of diabetes which terminated fatally in coma, and in which, for the first time, it was positively shown that in this state the blood loses its alkaline reaction (*Revue de Médecine*). As far back as 1883, at the debate on diabetes at the Pathological Society, Dr. Ralfe first drew attention to the fact that the symptoms of diabetic coma were not unlike those produced in animals poisoned by an injection of acids into their veins, or whenever attempts were made to diminish the alkalinity of the blood by other means; whence the speaker inferred that the poison concerned was of an *acid* nature, which by decomposition in the urine became converted into acetone. This idea of "acid intoxication" has since been generally adopted, and Minskowski has discovered the presence of an acid (oxybutyric) in diabetic urines which is capable of breaking up in aceto-acetic acid, and thus furnishing acetone. This acid does not, perhaps, exist in the blood and tissues in a free state, but as probably combined with some base with which it forms an

acid salt. In Lépine's case, intravenous injection of a saline fluid containing about an ounce each of sodium chloride and sodium bicarbonate to three pints of water was employed when the coma first set in. After this there was some immediate improvement from the coma, the pulse rallied, the temperature rose from 96° to 97.5° F., and the patient could speak, but not swallow. Twelve hours afterward venesection was employed prior to the trial of a fresh injection, when it found that, in spite of the previous injection of a large quantity of alkali, the reaction of the blood was neutral—a clear proof, Professor Lépine thinks, of the acid nature of the disease, and its power to destroy the normal alkalinity of the blood. It may be a question, however, says *The Lancet*, whether the injection of an alkaline bicarbonate into the blood in diabetic coma is a right procedure. For, though the reaction of the salt is alkaline, yet its constitution is acid, and, as Dr. Ralfe pointed out some years ago, probably acts as an acid salt in its decomposition with other salts in the body, and so actually tends, after the immediate effect of its alkalinity has passed off, to diminish the alkalinity of the blood. Should this on further inquiry prove correct, it might be advisable to employ neutral sodium phosphate instead of the acid sodium carbonate for intravenous injections.

A Bequest to the New York Academy of Medicine.—The will of the late Dr. Wesley M. Carpenter contains the following clauses:

"First. The sum of five thousand dollars to the New York Academy of Medicine, with which to found a lectureship, to be known as 'The Carpenter Lectureship.' This sum shall be paid to the trustees of said New York Academy of Medicine, who shall expend the interest thereon, annually, for one medical lecture. The lecturer shall be selected and the time at which the lecture shall be delivered shall be determined by a majority of the Council of the Academy, and the Academy shall publish the lecture in pamphlet form immediately after its delivery.

"If the Academy will not accept this gift and guarantee my executor that the above stipulations will be carried out faithfully, the proposed donation shall remain to be disposed of in my estate." —*New York Medical Journal.*

The Physician and His Charges.—The leading article in the May number number of the *Buffalo Medical and Surgical Journal* is a most practical address by Dr. Henry Flood, of Elmira, N. Y., before the graduating class of Niagara University. Coming to the matter of charges, there is no reason why a physician should not receive pay for what he does. He has no more right to give away his time than a grocer his goods, or a baker his bread. Some say it is severe for a physician to refuse to attend a suffering man because he has no money. The grocer and the baker are not asked to feed the starving. They send them to the city and county authorities for necessary food, fuel and clothing. But it is not advised that any physician shall go as far as the grocer or the baker. The deserving poor very seldom suffer, however, for the care of a physician, for all of us give them our time, money, and services. There is a class, however, that does not come under the head of charity. They are deadbeats, and they beat no one more than the physician. They are unreasonable, exacting; claim your constant attendance; call for you unnecessarily at night. Why? For it matters little to them whether or not you have a large bill, for they have no idea that they will ever pay it, and when you ask them for your dues, they turn upon you with criticism and abuse, and trump up some excuse for the avoidance of your just claim. They live beyond their means. They use fradulently the money that belongs to others. What you have earned by hard labor, they dishonestly withhold, and spend for their own gratification.

When you have a bill against a man, and cannot collect it, and you see this man or his family wearing better clothing than you, or if you see him attending the theatre, there is something wrong about him, for if he can afford to wear fine clothing, and dress his family

extravagantly, he can afford to pay you. If he has money to buy theatre tickets, he should pay his debts. If he can smoke good cigars and spend money treating his friends, he should pay his doctor's bill. If he calls on you, it is unmistakably your duty to refuse to attend him until he settles his accounts.

It is no charity to give such persons your services. Your time and strength are too precious to waste on such dishonest and ungrateful wretches.

Collect your bills often, and have a settled system to your finances. When you are unable to collect from certain persons find out the reason. If they are honest, industrious and frugal people, and, from ill-luck, are unable to pay, balance the books and charge it up to charity. But if these creditors are idle, extravagant and dishonest, and will not pay you, follow them up relentlessly with every means that the law provides for your protection.—*Practitioner.*

Eruption from the Internal Use of Arsenic.—Dr. Leontowitsch reports a case of eruption from internal use of Fowler's solution, occurring in an old lady, the dose being a small one administered twice daily for the relief of obstinate chills and fever. On the second day severe itching manifested itself on the neck and chest; on the third day a small macular red exanthem appeared upon the above-mentioned regions, the skin being slightly swollen and the seat of intolerable itching. By the fifth day it had spread over the abdomen. Upon discontinuing the remedy, the cutaneous symptoms disappeared in three or four days, but were reproduced as before on taking the arsenic a second time. It was subsequently shown that while the patient could not tolerate either arsenite of potassium, or arsenous acid with bromide of potassium, arsenite of quinine caused no unpleasant symptoms. —*American Journal of the Medical Sciences.*

What a Doctor Should Carry with Him.—We have received the following humorous letter from an esteemed subscriber in a northern New England State.

I am a country practitioner, and thought I would ask your advice in regard to what you think necessary for a country doctor to carry with him when he goes to see a patient.

When I first commenced practice, I carried but a small pair of pill-bags filled with what I then thought to be the essentials of medicine, having, of course, my lancet in my waistcoat pocket. I have been reading your valuable journal with interest, and as fast as I have become convinced of the necessity of using any article of medicine or instrument in my practice, have added it or them to my *armamentarium.* I now carry a medicine chest with a full assortment of medicines. I, of course, carry a stethoscope, as the unassisted ear is not considered quite modest in the examination of pregnant women.

I am convinced of the propriety of having my obstetric forceps always within reach, and so carry them. Being frequently applied to to extract teeth, I must carry my tooth extracting instruments with me. As in some cases it is desirable to have the bowels moved as soon as practicable, and as syringes are rarely found in private families in the West, I carry two, one for adults and a smaller one for children.

Being convinced from some articles published in your paper of the benefit of galvanism in certain cases, I carry a magnetic machine with me. I seldom now use general blood-letting, but carry a patent cupping apparatus that it may be within reach when needed.

My pocket-case of surgical instruments I carry in my medical chest, also my speculum, an assortment of pessaries and a vaginal syringe.

I wish you would send me by return mail three thermometers, one for the anus, one for the arm-pit, and one for the vagina; and if there is any thing else you think necessary, should be obliged if you would indicate it. I formerly rode in a one-horse buggy, but have lately found it necessary to put two horses on, and have it in contemplation to trade my buggy for one with a large bed. RUSTIBUS, M. D.

[We sympathize with our country friend, but he must keep up with the

"advance of science;" he can't expect to do business now-a-days with a lancet in one vest pocket and a paper of calomel and jalap in the other. We see he still absolutely needs a dozen or two indispensable articles, including a gyneological chair and an operating table; but, as our terms are strictly cash in advance, we want to hear from him again.—Ed.] *Massachusetts Medical Journal.*

Professor von Bergmann's Method of Antiseptic Treatment. — Dr F. Bramann, first assistant surgeon to the Surgical Clinic of the University of Berlin, reports on the antiseptic treatment adopted by Professor von Bergmann (*Archiv. für klinische Chirurgie*, vol. xxxvi., 1887, and *Centralblatt für die gesammte Therapie*, Dececmber, 1887). Sublimate gauze is prepared by exposing gauze during one quarter or half an hour to a continuous stream of water-vapor of 100° C. (212° F.), after which it is rapidly dried and impregnated with a solution of sublimate. Plain sterilized gauze is but rarely employed, and only in minor operations. The cotton-wool used for dressing is not impregnated, but merely sterilized by steam in the above manner. The waterproof sheets, linen sheets, napkins, towels, and sponges are disinfected in the same way. Small rolled-up pieces of sublimate gauze are generally sub stituted for sponges. The silk for sutures is sterilized; catgut is immersed for from ten to fourteen days in an alcoholic solution of sublimate (4 : 1,000), and afterward kept in a solution of 1 : 800 of sublimate in alcohol and 200 parts of distilled water, in which the catgut will not become brittle. The wound during the operation is irrigated with sublimated water (1 : 2,000); but in operations in the abdominal or pleural cavity the wound is merely wiped with pieces of sublimate gauze. In the mouth, rectum, and in the bladder, instead of sublimate, salicylic acid (1 : 1,000), boric acid (2 : 100), and at the temination of the operation iodoform ether (1 : 10), are employed. The instruments are left half an hour before use in a solution of three per cent. of carbolic acid. Hæmostasis is most carefully attended to, and the wound is not closed before the slightest trace of bleeding has disappeared, by which precaution the best results even without drainage are achieved; but there are exceptional cases in which the hæmostasis cannot be perfect and the wound cannot be kept free of serious oozing, or in which an aseptic progress is doubtful. In such cases, the wound is irrigated with a 1 : 1,000 sublimate solution, rinsed with iodoform ether, and loosely tamponned with a strip of iodoform gauze, the end of which is brought out in the corner of the wound, and is dressed over the tampon with sublimate gauze and cotton-wool, according to atiseptic rules. Should the dressing become saturated with the discharge of the wound, the external layers are to be renewed, but the iodoform gauze is left for two days, after which it can be easily and safely removed. The wound is now accurately closed by sutures, and union by first intention will take place even in cases in which the tampon had been left, owing to special reasons, for four to six days. —*London Medical Record.*

A Dangerous Nostrum.—So long as quack medicine may do no actual harm, it may perhaps be just as well to let the credulous public be imposed on. But when it comes to our knowledge that danger lurks in one of these nostrums it is our duty to be no longer silent, but to warn the ignorant that they may beware. One of the most ingeniously and extensively advertised quack-medicines, which have of late come before our notice, is the so-called "Dr. Buckland's Scotch Oats Essence." It is easy to make people believe that a substance, so valuable as a food, which, according to Dr. Johnson, is in England given to horses, and in Scotland is fed to the people with such excellent results, may have extracted from it principles of great value as medicines in disease. The proprietors of Scotch Oats Essence announce with great confidence in the gullibility of the public that their " Essence " contains avenesca, to soothe, calm, regulate and heal;

soluble oats phosphoids, to build up, nourish and supply waste; and boskine to regulate bowels and liver. These are expressions which are convincing to the public and the following strengthens its conviction: "Combined in Dr. Buckland's Scotch Oats Essence they make the grandest nerve formula ever known to medical men, and they unqualifiedly endorse it." Again, "There has never been any remedy known that has been so uniformly successful in all forms of brain and nerve exhaustion and also actual nerve diseases, as Scotch Oats Essence.

The daily papers, being well paid give its advertisements conspicuous space and strongly advise and endorse its use. It has been so well advertised that scientific attention has at last been directed to it. In the *Druggists' Circular* of April and May, this great fraud has been exposed, not simply as a harmless humbug, but as an insidious poison. "Under the bait of oats," the diabolical proprietor of this stuff, has placed the "bane of opium." A careful analysis shows that every ounce of this miserable preparation contains little less than one-half grain of sulphate of morphine. The dose recommended is from one-half to one teaspoonful at first, pushed until its full effect is felt.

The old and young are alike advised to use it. Idiosyncracy is recognized, much more being required to effect some than others. With this caution as to the commencing dose, it is indiscriminately advised by its inventor when pain is to be assuaged, sleep needed or exhaustion to be overcome. A teaspoonful would contain about one-sixteenth of a grain. It is easy to see, then, that taken as advised, the morphine habit could be readily induced. To this course, we feel sure, many of the morphine eaters of the future may trace their habit. It is time that respectable medical men should condemn such nostrums and warn the unsuspecting public. According to the two paragraphs published in the *Druggists' Circular* for May, "Dr. Buckland" the inventor of the "Essence," can be none other than Ludwig Spohr, a celebrated musical composor, who has been dead thirty years and is now resuscitated by this trafficker with human happiness for private gain. Scotch Oats Essence is probably a tincture of avena sativa morphine added.—*N. O. Med. & Surg. Reporter.*

Teaching Students to Think.—It is often a subject of regret to teachers in our medical schools that the work of the first two years is so soon forgotten; a man who has passed his preliminary examinations frequently so far forgets his scientific subjects in six months as to be unable when in the hospital wards to give a description of the cerebral supply to parts of the body, the convolutions of the brain, and the cranial nerves, or the minute anatomy of the kidney and liver; still, such students may have dissected diligently, attended lectures, and read at night, but they have not learned to think or are not trained to think systematically and correctly. This defect is, we suspect, not entirely the fault of the students, but is also in part due to defects in teaching. When observing students under examination, both for degrees and on the lower examinations, it has often been obvious that failure to pass the standard may depend upon inaccurate methods of thinking and speaking—or upon no previous thinking quite as much as from ignorance of the subject-matter. Observing the objects of study in dissecting-room does not necessarily teach thinking; to observe is to receive impressions, thinking may or may not follow observing. We have no intention of suggesting formal teaching of the law of thought in the form of logic, though this useful science used to be one of the extra subjects in the Arts examination of the Apothecaries Society. It does, however, seem needful to call attention to the importance of educating students to think as well as to observe facts; the scientific subjects and the teaching of medicine affords plenty of scope for both. The student is generally interested in the application of scientific knowledge to practice, and to show him such connection early in his career stimulates thinking. The constant application of anatomy, physiology, chem-

istry, comparative anatomy, and the principles and facts of vegetable biology to what is seen in patients, produces an expansion of the subjects of thought, and engenders habits of correct thinking. To follow well-made analogies, and to answer questions which exercise the imagination in a scientific manner, as in describing the minute conditions of circulation and the cause of nerve currents in reflex actions, necessitates correct thinking. A student will often say that he hears a systolic mitral *bruit*, and is satisfied with his achievement, without understanding that the sound heard suggests an hypothesis which requires to be fully worked out before he can know the condition of the patient. A man well trained, not only in observation but also in rapid and correct thinking, will get through much more good work in practice than one less thoughtful. Thought, preceding action, guides him rapidly to make the necessary observations in the case before him, till thinking becomes automatic, and his opinions are rapidly formed upon brief observations, and what is ill termed "clinical instinct." In making these remarks we by no means wish to depreciate the necessity of thorough and systematic examination of all the organs as a matter of primary necessity.—*British Medical Journal.*

Society Practice.—The custom followed by so many physicians in this city of taking "society practice," has grown to such an extent as threaten destruction to all legitimate work by those few who value the dignity or well-being of the profession. Four-fifths of the people of this city are banded together into so-called "Benevolent Associations," whose objects are weekly indemnity while sick, free medical services, including drugs, and free burial in case of death. Every one of these society annually chooses a physician, a druggist and an undertaker, and always after fierce competition. Just before the annual election a committee goes around to some fifteen or twenty physicians and the same number of druggists and undertakers, and requests each of these functionaries *to put in a bid.* Then begins the scramble. One physician will offer to do the work," which includes attention to the families of the members, for four dollars per member per annum; another will bid three, another two, and so on until, as as actually happened a few weeks ago, the final and successful bidder sees a profit and honor in the job at "forty cents (40c.) per member per annum, payable quarterly."

Perhaps the matter will be better stated by a physician who has tried it; "With large associations, say 300 members, and the pay, the usual amount, $2.00 per member annually, the result to a conscientious physician would be eight to ten cents a visit. The doctor is expected to attend a member's household, which includes his wife, children and all those dependent upon him, such as a sister, mother, cousin, aunt; frequently servants are run in upon him as relations. No further benefit is derived from such practice. It were much better to spend this time in study and the acquiring of a private practice by strict attention to calls. This same physician, with a private practice which was increasing at the rate of $500 to $600 a year, took some societies; the increase stopped at once. He gave up the societies and his practice again increased—the increase amounting to more than the sum obtained from all of the societies combined, and this growth was in no measure due to private cases from the members of the societies which he had resigned. He has no doubt that had he not taken societies his private practice would now be double what it is. If you will deduct from the sums paid by your associations your car fare, or the expense of a horse, buggy and driver, and the sums you naturally lose in the way of good cases or office visits, say only one each per day, the profits in society practice are very meagre. The society doctor lives the life of a slave, tortured in mind and body, and loses all respect for himself and the profession. For these reasons he would say to a young man contemplating society practice, 'Don't!"

To make it plainer how much the profession is lowered by such practice, it

should be told how often the doctor is berated for delay or failure to relieve; how he is called up before the Society and reprimanded and made to pay the bill of some physician called in by a member, because the doctor was not to be found, and how he is spoken of as "only the society doctor, but we don't have him when anybody is sick."

And, on the other hand, a society doctor exclaims, "Do you suppose I am going to give two dollars and a half worth of services for ten cents?" Another says, "I have not time to do them justice. I paid thirty-seven visits yesterday, the first at 5 A. M., and the last at 11 P. M., and used up two horses, and myself, too."

As the physician, quoted above says, it is all right to practice upon that class of people in the hospital, where you can enforce their respect, but in society practice it is another thing. The people think because they have voted for you, they can say what they please, and their conduct towards a physician is often shameful, as well as humiliating to him.

If this kind of work is not degrading we hardly know what is. It is degrading to both the physician and patient, to the profession and the community. But more, it is directly opposed to the code of ethics of the A. M. A., and because this code is simply an expression of the relations which should exist between one gentlemen and another and the community inwhich he lives, society practice indicates a willingness on the part of a man to voluntarily lower himself in the eyes of his fellows and the community at large.

The subject is too big to be exhaused in one short editorial, but we propose to sift it thoroughly and, if possible persuade the profession to change its ways. —*N. O. Medical and Surgical Journal Report.*

Medical Items.

The New Jersey State Medical Society meets at Schooley's Mountain on June 12 and 13, 1888.

The Ohio State Medical Society holds its forty-third annual meeting at Columbus, O., on June 13, 14, and 15, 1888.

The Electro-Therapeutical Society held its regular monthly meeting at the office of Dr. Wm. E. Moseley on Monday, June 5th.

New Brunswick, N. J., is suffering from a prevalence of diphtheria that has almost become an epidemic. There have been many deaths.

The thirty-third annual meeting of the Kentucky State Medical Society will be held at Crab Orchard Springs, commencing Wednesday, July 11th.

Gov. Hill, of New York, has signed the bill abolishing hanging for all murders committed after January 1, 1889, and substituting death by electricity therefor.

A hospital designed for the exclusive use of the French population will be sustained in New York at a cost of $55,000. The institution will have a capacity of sixty beds.

The warm weather has already begun to drive the fortunate members of the community to color places and many physician will spend the summer in Europe, thus leaving a wide field for their more courageous colleagues.

A student of medicine in Brooklyn in relating the advantages of his local medical school, said that the facilities for the study of percussion and "osculation" were unexcelled. This *bon mot* was most innocently uttered.

The University of Heidelberg recently conferred the degree of M.D. on Carl Umbach, who had written a brilliant dissertion on "The Influence of Antipyrine on Nitrogenous Secretions." And now Umbach turns out to be a quack, and the authorities of the famous university are smoking their pipes in gloomy silence.

The recent extension of the city limits has had the effect of regulating medical and sanitary affairs in the district just added. Physicians from this part are now compelled to register at the city hall and hereafter will be stricter in than reports of births and deaths. The much sought for position of vaccine physician will be allotted to those of strongest political influence.

The Baltimore Academy of Medicine has elected the following officers to serve for the ensuing year. President, Dr. H. M. Wilson; Vice-President, Dr. Samuel Theobald; Treasurrer, Dr. G. Lane Taneyhill; Secretary, Dr. Hiram Woods. Reporting Secretary, Dr. W. B. Canfield; Executive Committee, Drs. B. B. Browne, A. K. Bond and L. E. Neale. The meetings of the Academy have adjourned until the second Tuesday in October.

Original Articles.

LECTURES ON THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHÉ, M.D.,

Professor of Dermatology and Hygiene in the College of Physicians and Surgeons, Baltimore.

Lecture VIII.

[Synonyms: Syphiloderma pigmentosum, macular syphilide, tâches syphilitiques.]

Pigmentation of the skin in the course of syphilis is not infrequent. Syphilographers do not agree, however, upon the exact etiological relation in which syphilis stands to the pigmentary changes. Hardy, Pillon, Fournier, Schwimmer, Drysdale, I. E. Atkinson, and Duhring are of the opinion that the lesion is a true syphilide. On the other hand, Zeissl, Kaposi, Taylor, G. H. Fox, and Hyde regard it as merely a sequence of a foregoing syphilide, or an evidence of syphilitic cachexia. My own view is in accord with that of the observers first cited above. I am quite sure, however, that the true pigmentary syphilide is rare, and that most cases of pigmentation of the skin occurring in syphilitic subjects are merely consecutive to a syphilitic infiltration, or an expression of a cachectic condition.

A very good account of the pigmentary syphilide has been given by Pillon who describes it as follows: "On the skin of the neck, which in women is so white, so delicate and so free from hair, this maculated syphilitic eruption shows itself in the form of mottled dicolorations, communicating with each other and circumscribing healthy spaces, the whiteness of which is brought out in such bold relief as to lead one at first to believe that these white spaces are the seat of the disease and to give them the appearance of patches of leucoderma. This mottling without elevation above the surface, of an ochre or coffee and milk color is neither painful nor itchy, and it may be present without being discovered. There is neither desquamation nor eruption, the edges are uneven and ill-defined and gradually fade away into the intermediate normal colored spaces. Meeting and uniting at other points the pigmented lines constitute a kind of net work enclosing in its meshes the white spots above mentioned."

The pigmentary syphilide is usually localized upon the neck. Fournier found it twenty-nine times out of thirty in this locality. It may be limited to a few patches or may encircle the neck like a broad collar. It is also found upon the limbs and sometimes upon the trunk. Nearly all observers state that it is much more frequent in females than in males. A short definition given by Fournier is as follows: "A macular lesion of the skin, appearing in the secondary period of syphilis, almost exclusively occurring in women, occupying the cervical region, apruriginous, slow in development and rebellious to treatment."

Diagnosis of the Pigmentary Syphilide.

The true pigmentary syphilide must be differentiated from the pigmentation left after other syphilitic eruptions, from chloasma, tinea versicolor and cachetic pigmentations.

The pigmentation following other syphilides has usually a clear history of the preceding eruption, and, even if this be missing, the lesion is almost distinctive. In the erythematous and papular syphilide the neck is rarely the site of the eruption. Ulcerating syphilides, which are often followed by pigmented scars leave such a decided impression that their preëxistence can be predicated even if no subjective history of the case can be obtained.

Chloasmata, or moth patches are, like the pigmentary syphilide, almost exclusively met with in the female sex. They are found especially about the face, more particularly the outer limits of the brow, the cheeks and the chin; are frequently associated with uterine disease, have no connection with syphilis, and seldom extend to the neck, the

place especially liable to attack by the pigmentary syphilide.

Tinea versicolor presents some points of similarity with the pigmentary syphilide, and may readily be mistaken for it. The spots and patches of tinea versicolor are, however, usually found upon the chest, abdomen and arms, and only exceptionally—perhaps never exclusively—upon the neck. The surface is not smooth as in the syphilitic discoloration, but covered with furfuraceous scales which can be easily scratched off with the finger nail. Microscopic examination of these scales will disclose the presence of mycelium and spores of microsporon furfur, the parasite to which tinea versicolor, is due. This fungus is absent in the pigmentary syphilide. A further point of distinction is the absolute lack of subjective symptoms in the syphilitic stain, while in tinea versicolor there is often slight itching. Finally appropriate parasiticide treatment will produce a rapid disappearance of the parasitic discoloration, while it will have no effect upon the pigmentary syphilide.

Pigmentations due to various cachexiæ, such as the malarial, cancerous, or syphilitic diathesis, so-called, or to anemia from any cause, may be easily differentiated from the true pigmentary syphilide by the more or less general distribution of the cachectic pigmentation, the absence of the sharp outlines between the light and dark areas, and concurrent evidences of anemia.

Leucoderma often presents very great similarity to the pigmentary syphilide, but upon careful examination it will be found that the white patches are due to an absolute diminution of pigment, while in the syphilitic lesion the whiteness of the spots is only relative owing to the deeper pigmentation of the surrounding skin. Cases in which white spots of the skin follow upon the sites of syphilitic scars must be differentiated from both these affections.

Melanoderma occurring in the course of Addison's disease, is usually more pronounced in those regions where there is normally excess of pigment, as in the areolæ of the nipples, on the genital organs, backs of the hands, etc. Later in the course of the disease the pigmentation becomes uniformly diffused. In none of the forms of cachectic pigmentation is the neck a special site of predilection as seems to be the case with the pigmentary syphilide.

Prognosis of the Pigmentary Syphilide.

Fournier states that the usual duration of the pigmentary syphilide is much longer than that of all other syphilides. It may last many months, or even a year or two, without undergoing any perceptible change. The lesion is only annoying from its appearance. It neither itches nor burns, nor does it ever ulcerate and leave scars.

Specific treatment seems to have no effect whatever upon the continuance of the lesions or only modifies them " with despairing slowness."

Syphilitic Alopecia.

Falling out of the hair is not mentioned as a symptom of syphilis by the earliest writers upon the disease. The first authors who refer to it are Fracastori, Brassavola and Falloppio who agree in the statement that this symptom was first observed between 1530 and 1540. Not only the hair of the head, but also that of the beard and eye-brows fell out, which, as Brassavola says, " has a ridiculous effect and raises mirth in the beholders." Nicolas Massa, one of the most accurate observers of the sixteenth century, also wrote thus accurately of the alopecia of syphilis: " *Et quoniam inter quam plurima morbi gallici accidentia, depilationes capillorum, barbæ, aliarum partium corporis.*" Mercury was accused of causing this, as well as some of the other accidents of syphilis, but Fracastori and other writers showed that alopecia was not confined to those syphilitics who were treated with mercury.

Syphilitic alopecia is one of the early symptoms of the secondary period of the disease. The hairs become dry, lose their lustre and fall out. The degree of baldness produced is seldom great, and

is never permanent. In many cases only a uniform thinning of the hair is noticeable, as new hairs grow out before the defluvium is completed. Cases in which the hairs of the beard, eyebrows, axillæ, or genital region fall out are rare.

Sometimes the alopecia is accompanied by, and probably to some extent dependent upon, seborrhœa of the scalp. In other cases the hair falls out in patches, which if closely examined are found to be scaly and reddened. These are patches of the erythematous syphilide and the hair falls probably in consequence of the local morbid process.

The cause of the syphilitic alopecia, unaccompanied by seborrhœa or inflammation is rather difficult to explain. We can only assume that the specific virus produces some changes in the nutrition of the hair which result in atrophy. Some authors claim that the general impoverishment of the blood in syphilis is sufficient to account for this defective nutrition, but it seems to me that this would not account for it. In other diseases (non-specific in nature) even greater impoverishment occurs without producing the same effect upon the hair.

Fournier describes four degrees of syphilitic alopecia, but this seems to me an unnecessary refinement.

Diagnosis of Syphilitic Alopecia.

The diagnosis between syphilitic alopecia and alopecia areata is not difficult. In the latter, the hair falls out suddenly, and perfectly bare and white, patches, with no scales, broken hairs or pustules, are seen. In syphilitic alopecia, the fall of hair is more gradual, it is rarely circumscribed as in alopecia areata, and if erythematous patches on the scalp become denuded there is usually a reddened base covered with scales.

The baldness produced by tinea tonsurans is generally easily recognized by its scaly base, papulo-pustular border, and the broken, "stubbly" condition of many of the hairs on the affected patch and vicinity.

The prognosis of syphilitic alopecia is favorable. In some cases however, where the hair falls out in consequence of suppuration or ulcerative destruction of the hair papillæ, regeneration of the hairs can of course not be expected, but these cases cannot properly be included under the designation of syphilitic alopecia.

SYPHILITIC DISEASES OF THE NAILS.

Brassavola mentions diseases of the nails (ungiarola) as a manifestation of syphilis. Two affections are described by authors; one affecting the nails proper: onychia, and a second attacking the periungual tissues; paronchia, or perionychia.

In the first variety there is morbid brittleness, partial or complete separation, and hypertrophy of the nail. The diseased portion of the nail is gradually pushed forward by the new growth of ungual substance from the matrix, and a new perfectly or imperfectly formed nail takes the place of the diseased one. This process is usually without pain or other subjective symptoms.

In syphilitic paronychia, the seat of the disease is in the soft tissues under or around the nail. It may be simply a papular syphilide localized about the nail, or a gummatous infiltration which often undergoes ulceration. This form is painful and obstinate. When it affects the toes it often interferes to a great degree with locomotion.

THERAPEUTICS OF DIPHTHERIA.*

BY A. JACOBI, M.D., OF NEW YORK.

Mr. President: You have conferred upon me the honor of an invitation to make some introductory remarks to your discussion on the treatment of diphtheria. This invitation I was anxious to accept, if for no other reason but to see the profession of Philadelphia at their home, and at work. That I should bring anything new to you, or striking,

*Read before the Philadelphia County Medical Society, May 23, 1888.

I never for a moment believed, since I was ever in the habit of reading your books and journals, and the proceedings of your societies. But it pleased me to infer from the demand that I should appear before you, that I was, to a certain extent, considered one of you, and to prove by my willingness to come that I appreciated the honor offered.

When I considered the subject which is to be the topic of your deliberations this evening, and remembered the vastness of its literature, it became clear to my mind that a digest, even so small, of what has been written, would fill more than many evenings, and still fall short of accomplishing the object in view. I was aware that I must not come here with literature. You will excuse me, therefore, for only detailing in plain language some of the facts gathered in my contact with diphtheria, these thirty years, and the therapeutical measures which I have learned to appreciate and to practise. Thus I shall not touch upon the large number of panaceas which have ascended like rockets and never were seen again.

Diphtheria is a contagious disease. Severe forms may beget severe or mild forms. Mild cases may beget mild or severe cases. There is probably no spontaneous origin of diphtheria, any more than there is a spontaneous origin of cholera or scarlatina. What has been called follicular amygdalitis (or "tonsillitis") is diphtheria in many, perhaps most, instances. It is seldom dangerous to the patient, because the tonsils have but very little lymph communication with the rest of the body. But the diphtheritic variety of follicular amygdalitis also is contagious. This mild variety is that form which adults are apt suffer. It made me proclaim the warning that there is as much diphtheria out of doors as there is in doors; as much out of bed as in bed. With this variety the adult is in the street, in business, in the school-room, in the railroad car, in the kitchen and nursery. With this variety, parents while complaining of a slightly sore throat, kiss their children. Wherever it is suspected, it ought to be looked after. Where it is seen it ought to be isolated and treated, less perhaps for the sake of those who are sick, than of those who are in serious danger of being infected. This is the more necessary, as this form is apt to last long and give rise to repeated attacks. But it is not only the mild variety which is liable to last long. Serious, undoubted cases are also apt to last for weeks, and some of them months. As long as they do persist they are contagious.

The reminiscences and quotations from former writings must justify the preëminent place I claim for preventive treatment.

Those sick with diphtheria, severe or mild, must be isolated. If barely possible, the other children ought to be removed from the house. This can but rarely be done in the homes of the poor, in the densely populated districts. A great charity is still waiting for its consummation, viz., that of erecting buildings, dormitories, and playrooms for those who ought to be temporarily exiled from their infected homes. A suggestion of mine, before the New York State Medical Society in its meeting of 1882, resulted in the erection of the Willard Parker Hospital of New York, for the benefit of those suffering from scarlatina and diphtheria. The erection of a sufficient number of temporary homes would be a still greater blessing to the poor, and a greater protection to the public at large. If it be impossible to send the well children away, let them remain outside the house, in the air, as long as feasible, and with open bedroom windows during the night, in the most distant part of the house; during the winter in a lower floor. Their throats must be examined every day, and their rectal temperatures taken by the mother, so that the physician may be called on the occurrence of but slight changes. The few minutes spent in this way are amply repaid by the safety they may accomplish. The attendants upon cases of diphtheria must have no intercourse with the well children; though a brief visit of the physician may not render him sick, or dangerous to others, a long exposure affects him or a nurse to a greater or less degree.

The well children of a family in which there is diphtheria, must not go to school or church. Schools must be closed when a number of pupils have been attacked; or, better still, when there is an epidemic, though it may not yet have affected the school children to a great extent; the teachers ought to be taught how to examine throats, and directed to do so every morning, and send home those children who are suspected.

When an attack of diphtheria has made its appearance, it is well enough to examine the hygienic condition of the house with its deteriorating influences on the general health of the inmates, and to look after the source of the case in the persons of friends, attendants, and help. A family with children ought to insist upon the occasional inspection of the throats of their servants; those with chronic pharyngeal catarrh must not be hired. A seamstress, or laundress coming for an occasional day's work, sick nurses, children's nurses, and cooks, ought to be examined from time to time, the more so, the more such people are inclined to conceal slight troubles, for obvious reasons. The opportunities for infection are so numerous that it is impossible to sail absolutely free from it. It is easy to imagine how many cases of diphtheria are liable to be disseminated by teachers, shopkeepers, restuarants, barbers, and hairdressers.

In times of an epidemic, every public place, theatre, ball-room, dining-hall, and tavern ought to be treated like a hospital. Where there is a large conflux of people there are certainly many who carry the disease. Disinfection ought to be enforced at regular intervals. In this respect I can but repeat what I said in my treatise (p. 172) and Pepper's *Cyclopœdia* (I. 697). Public vehicles must be treated in the same manner after a suspicious case has been carried; that it should be so when a case of small-pox has happened to be conveyed in them, appears quite natural. Livery stable keepers who would be anxious to destroy the germ of small-pox in their coaches, must learn that diphtheria is as dangerous a passenger as variola, and what is correct in the case of a poor hack, is more so in a railroad car, whether emigrant or Pullman. I have seen many cases coming to and leaving the city in them. They ought to be thoroughly disinfected in times of an epidemic at regular intervals, for the highroads of travel have always been those of epidemic diseases. Still, can that be accomplished? Will not railroad companies resist a plan of regular disinfections, because of their expensiveness? Will there not be an outcry against this despotic violation of the citizen, the independence of the money bag? Certainly there will be, exactly as there was when municipal authority commenced to compel parents to keep their children from school when they had contagious diseases in their families, and when small-pox patients were arrested because of their endangering the passengers in a public vehicle, or taken to a fever hospital for the protection of their neighbors. In such cases it is not society, or the State, that tyrannizes the individual, it is the individual that endangers society.

To what extent the infecting substance may cling to surroundings, is best shown by the cases of diphtheria springing up in premises which had not seen diphtheria for a long time, but had not been interfered with; and best, perhaps, by a series of observations of auto-infection. When a diphtheritic case has been in a room for some time, the room, bedding, curtains, and carpets, are infected. The child is getting better, has a new attack, may again improve, and is again stricken down. Thus I have seen them die; but also improve immediately after being removed from that room or house. If barely possible, a child with diphtheria ought to change its room and bed every few days.

To other rules of protection and disinfection, both private and public, including the prohibition of public funerals, I allude, only for the purpose of referring to the admirable rules published in its *Bulletin* No. 10, of September 6, 1879, by the National Board of Health, and copied in my treatise on

diphtheria, New York, 1880, and my article on diphtheria in Pepper's *System of Practical Medicine*, vol. i. p. 698.

Prevention can accomplish a great deal for the individual. Diphtheria will, as a rule, not attack a healthy integument, be this cutis or mucous membrane. The best preventive is, therefore, to keep the mucous membrane in a healthy condition. Catarrh of the mouth, pharynx, and nose must be treated in time. Many a chronic nasal catarrh, with big glands round the neck, requires sometimes but two or three regular salt-water injections (1 : 130) into the nose, and gargling if the children be large enough to do so. The addition of one per cent. af alum will often be found useful. This treatment, however, must be continued for many months, and may require years. Still there is no hardship in it, and no excuse for its omission. The nasal spray of a solution of nitrate of silver, 1 : 500 or 1000, will accelerate the cure, and not infrequently has a treatment which was considered obsolete when I was young, been of great service to me. It consists in the internal administration of the tincture of pimpinella saxifraga. It is certainly an efficient remedy in subacute and chronic pharyngitis and laryngitis. I generally give it to adults, diluted with equal parts of glycerine and water, a teaspoonful of the mixture every two or three hours, with the proviso that no water must be taken soon after.

Large tonsils must be resected in times when there is no diphtheria. During an epidemic every wound in the mouth is liable to become diphtheritic within a day, and such operations ought to be postponed if feasible. The scooping of the tonsils, for whatever cause, I have given up since I became better acquainted with the use, under cocaine, of the galvanocautery. From one to four applications to each side, or to the post-nasal space, are ususlly sufficient for every case of enlarged tonsils or lacunar amygdalitis. It is advisable to cauterize but one side at a time, to avoid inconvenience in swallowing afterward, and to burn from the surface inward. Cauterization of the centre of the tonsils may result in swelling, pain, and suppuration, unless the cautery is carried entirely to the surface; that is to say the scurf must be on, or extend to, the surface. Another precaution is to apply the burner cold, and heat it *in situ*.

Nasal catarrh and proliferation of the mucous and submucous tissue may require the same treatment, but in my experience the cases which require it, are less frequent than in those in which the tonsils need correction.

The presence of glandular swellings round the neck must not be tolerated. They, and the oral and mucous membranes, affect each other mutually. Most of them could be avoided, if every eczema of the head and face, every stomatitis and rhinitis resulting from uncleanliness, combustion, injury, or whatever cause, were relieved at once. A careful supervision of that kind would prevent many a case of diphtheria, glandular suppuration, deformity, or phthisis.

For its salutary effect on the mucous membrane of the mouth, chlorate of potassium, or sodium, which is still claimed by some to be a specific, or almost so, is counted by me amongst the preventive remedies. If it be anything more, it is in a case of diphtheria an adjuvant. It exhibits its best effects in the catarrhal and ulcerous condition of the oral cavity. In diphtheria it keeps the mucous membrane in healthy condition, or restores it to health. Thus it prevents the diphtheritic process from spreading.

Diphtheria is seldom observed on healthy, or apparently healthy, tissue. The pseudo-membrane is mostly surrounded by a sore, hyperæmic, œdematous mucous membrane. Indeed, this hyperæmia precedes the appearance of the diphtheritic exudation in almost every case. The exceptions to this rule consist of those cases in which the virus may take root in the interstices between the normal tonsillar epithelia, pointed out by Stoehr but a few years ago. Indeed, many cases of throat disease occurring during the prevalence of an epidemic of diphtheria, are but those of pharyngitis which under favorable cir-

cumstances may develop into diphtheria. These throat diseases are so very frequent during the reign of an epidemic, that in my first paper on diphtheria (August 11 and 18, 1860, *Amer. Med. Times*) I based my reasoning on 200 cases of genuine diphtheria, and 185 of pharyngitis, without a visible membrane.

These cases of pharyngitis, and such of stomatitis and pharyngitis accompanying the presence of membranes, are benefitted by the local and general effect of chlorate of potassium. The surrounding parts being healthy or returning to health, the membrane remains circumscribed. The generally benign character of purely tonsillar diphtheria, which is apt to run its full course in from four to six days, has in this manner contributed to secure to chlorate of potassium the reputation of being a ready, *the*, remedy in diphtheria. The dose of the salt must not be larger than 15 grains (1 gramme) for an infant a year old, not over 20 or 30 (1.5–2.0) for a child from three to five years, in the twenty-hour hours. An adult must not take more than 1½ drachms (6 grammes) daily. These amounts must not be given in a few large doses, but in repeated doses and at short intervals. A solution of one part in sixty will allow a teaspoonful every hour, or half a teaspoonful every half hour in the case of a baby one or two years old.

It is not too late yet to raise a warning voice against the use of larger doses. Simple truths in practical medicine do more than simply bear repetition, they require it. For though the cases of actual chlorate of potassium poisoning are no longer isolated, and ought to be generally known, fatal accidents will still occur even in the practice of physicians. When I experimented on myself, with half ounce doses, thirty years ago, the results were some gastric, and intense renal, irritation. The same were experienced by Fountain, of Davenport, Iowa, whose death from an ounce of the salt has been impressively described in Alfred Stillé's *Materia Medica*, from which I have quoted it in my treatise on diphtheria. His death from chlorate of potassium induced me to prohibit large doses as early as 1860. In my contribution to Gerhardt's *Handbuch der Kinderkrankheiten*, vol. ii., 1877, I could speak of a series of cases known to me personally. In a paper read before the Medical Society of the State of New York in 1879 (*Medical Record*, March 15th,) I treated of the subject monographically, and alluded to the dangers attending the promiscuous use of the drug, which has descended into the ranks of domestic remedies; and, finally, in my treatise (New York, 1880) I collected all my cases, and the few then recorded by others. Since that time the recorded cases have become quite numerous, and but a few days ago a few new ones were related before the Practitioners' Society of New York. The facts are undoubted, though the explanations may differ. The probability is that death occurs from methæmoglobinuria produced by the presence of the poison in the blood; though Stockvis, of Amsterdam, has tried, by a long series of experiments, to fortify my original assumption that the fatal issue was due to acute nephritis.

The attempt at forming indications for the treatment of patients with diphtheria—I refuse to say treatment of diphtheria—based upon the preconceived or acquired idea as to the nature and causes of diphtheria, are all futile. We know that many cases are undoubtedly of local origin; but there are those in which we require no other proof for its original infectious character than the fact that there is a period of incubation. But all that is indifferent, in view of the fact that the cases we are called upon to treat are, as a rule, or have become, both local and constitutional. It is these we have mostly to deal with.

There is no better proof of the non-existence of a specific in diphtheria than the fact that the pharmacopœia has been exhausted to find one, and new remedies, legitimate and illegitimate, are being recommended all the time as panaceas. While there are certain indications resulting from the characteristics common to all, every case must be treated on general principles, which

must be applied to the prominent individual features. When there is a high temperature in the beginning, it requires all the tact of a good physician to judge of the advisability of reducing it by antifebriles, such as sponging, warm bathing, cold bathing, antipyrin, antifebrin, or the subcutaneous use of the carbamide of quinia. Convulsions may demand active treatment, such as chloroform inhalations, or chloral hydrate internally or in the rectum. Vomiting, or other cerebral symptoms, may ask for liquids, or smaller or larger doses of opiates. A very quick and feeble pulse may require a few large doses of a heart stimulant, digitalis, strophanthus, or spartein in the very beginning.

Renal complications are frequent and occur at an early time. The majority of cases terminate favorably, in some a large amount of albumin will be eliminated in the course of a few days and disappear shortly. But whether your individual case will be of that nature, you do not know, and in time of danger nothing must be taken for granted. Milk or farinaceous diet, plenty of water, or, better, Poland, Bethesda, Seltzer, Apollinaris, or Vichy, warm bathing, warm feet, a few good doses of calomel, a number of hourly or two-hourly small doses of opium which are better than those of digitalis, and nitro-glycerine, will often prove beneficial. If a diffuse nephritis, such as is more frequently met with in scarlatina, be the result, it impairs the prognosis and requires further treatment conducted on general principles.

To what extent local treatment, if it be possible to employ it, is effective, can best be seen on external diphtheritic surfaces, thus the cutis denuded by vesicatories, the inguinal regions sore with intertrigo, the vagina, circumcision wounds, or tracheal incisions. I have tried almost everything which has been recommended for these conditions, but am most pleased with the effect of iodol, or iodoform powdered, or one part with eight or ten of vaseline. Powders of subnitrate of bismuth, boric acid, or salicylic acid with fifteen or twenty-five its quantity of starch have not given me the same satisfaction.

The treatment of diphtheritic conjunctivitis requires also nothing but local treatment. It consists in the application of small ice-bags, or iced cloths which must be changed every few minutes, and the frequent instillation of a saturated solution of boric acid, with or without atropia.

The local treatment of the pseudomembranes of the fauces is a subject of great importance. To look upon them as an excretion which needs no interference, is incorrect. If it were possible to remove or destroy them, it would be a great comfort; but they can be reached only in certain places, and just in those in which they do least harm. Pseudomembranes on the tonsils are the least dangerous, for their lymph communication with the rest of the body is very scanty.

Thus almost all forms of tonsillar diphtheria are amongst the most benign, at least as long as the process does not extend. Most cases of the kind run their mild course in from five to seven days, and it is just these which have given rise to the many proposals of tearing, scratching, cauterizing, swabbing, brushing, and burning. There are cases which do not show the harm done. The fact is that neither the galvano-cautery nor carbolic acid, nor tannin and glycerine, nor perchloride or subsulphate of iron can be applied with leisure and accuracy to the very membrane alone except in cases of very docile and very patient children. In almost every case the surrounding epithelium is getting scratched off or changed, and thus the diphtheritic deposit will spread. Besides, the membrane of the tonsil is changed surface tissue, as it always is wherever the epithelium is pavement, and not deposited upon the mucous membranes from which it might be easily detached. Whatever is done must be accomplished without violence of any kind. If nasal injections be found advisable they can be made to wash the posterior pharynx and the tonsils sufficiently, so as to render the special treatment directed to the throat absolutely useless. Besides, it is easier, and meets with less objection, and gives rise to less exhaustion than the forcible opening of the mouth. This

is of very great importance, as I shall show in connection with the local treatment of the nasal cavity. Where it is possible to make local applications without difficulty, the membrane may be brushed with tincture of iodine several times daily, or a drop of rather concentrated carbolic acid. Of powders I know only one, the application of which is not contraindicated, viz., calomel. Even this may irritate by its very form. Everything dry irritates and gives rise to cough or discomfort. Whatever has, besides, a bad taste or odor, such as sulphur, iodoform, or quinia, must be abhorred.

For the purpose of dissolving membranes papayotin, or papain, has been employed. It is soluble in twenty parts of water, and may be injected, sprayed, or brushed on. I have used it in greater concentration, in two or four parts of water and glycerine, in the nose, throat, and through the tracheotomy tube, in the trachea. One of the irrepressible drug manufacturers and advertisers pushes the claims of some modification of the drug, which he calls papoid. For the same purpose trypsin is preferred by others. The mode of its application appears to be the reverse of indifferent. But lately I have seen, in the practice of one of our best known practitioners, papayotin applied in powder, which resulted in constant irritation of the throat while the patient otherwise was convalescent. The pharyngeal hyperæmia and slight exudation disappeared when mild alum washes were substituted.

Steam.—Its inhalation is useful in catarrh of the mucous membranes, and in many inflammatory and diphtheritic affections. On mucous membranes it will increase the secretion and liquefy it, and thus aid in the throwing off of the pseudo-membranes. Its action is the more pronounced the greater the amount of muciparous follicles under or alongside a cylindrical or fimbriated epithelium. Thus it is that tracheo-bronchial diphtheria, so-called fibrinous bronchitis, is greatly benefited by it. Children affected with it I have kept in small bath-rooms for days, turning on the hot water, and obliging the patient constantly to breathe the hot clouds. Several such cases I have seen recover with that treatment. Atomized *cold* water will never yield the same result. Nor have I seen the patient inhalers do much good.

Still, where the surface epithelium is pavement rather than cylindrical, and but few muciparous follicles are present, and the pseudo-membrane is rather immerged in, and firmly coherent with, the surface—for instance on the tonsils and the vocal cords—the steam treatment is less appropriate. On the contrary, moist heat is liable in such cases to favor the extension of the process by softening the hitherto healthy mucous membrane. Thus it takes all the tact of the practitioner to select the proper cases for the administration of steam, not to speak of the judgment which is required to determine to what extent the expulsion of air from the steam-moistened room or tent is permissible.

Steam can be properly mixed with medical vapors. In the room of the patient water is kept boiling constantly, over the fire place, provided the steam is prevented from escaping directly into the chimney, on a stove (the modern self-feeders are insufficient for that purpose and abominations for every reason), over an alcohol lamp if we cannot do better, not on gas if possible, because of the large amount of oxygen which it consumes. Every hour a tablespoonful of oleum terebinthinæ, and perhaps also a teaspoonful of carbolic acid, is poured on the water and evaporated. The air of the room is filled with steam and vapors, and the contact with the sore surfaces and the respiratory tract is obtained with absolute certainty.

The secretion of the mucous membranes is sometimes quite abundant under the influence of steam, but still, like that of the external integuments, increased by the introduction of water into the circulation. Therefore, drinking of large quantities of water, or water mixed with an alcoholic stimulant, must be encouraged. Over a thoroughly moistened mucous membrane the pseudo-membrane is more easily made to float, and macerate.

It was for this purpose that pilocarpine, or jaborandi, was highly recommended. Guttmann recommended it as a panacea in all forms of diphtheria. There is no doubt that the secretion of the mucous membrane is vastly increased by its internal application, and by repeated subcutaneous injections of the muriate or nitrate of the alkaloid, but the heart is enfeebled by its use. I have seen but few cases in which I could continue the treatment for a sufficient time. In many I had to stop it because after some days of persistent administration I feared for the safety of the patients. Thus, as early as in the meeting of the American Medical Association at Richmond, eight years ago, I pointed out the exaggerations in the statements of Guttmann. There will be but exceptional cases in which pilocarpine will be tolerated long enough to do good. It is one of the remedies by which we may cure our case and will kill our patient.

Diphtheria of the nose is apt to terminate fatally unless energetic treatment is commenced at once. This consists in persevering disinfection of the mucous surface. The disinfecting procedure must not be omitted long because of the general sepsis resulting from rapid absorption from the surface which is supplied with lymph ducts, and small superficial bloodvessels to an unusual extent. Disinfectant injections must be continued every hour, for one or more days. If they are well made, the consecutive adenitis, particularly that about the angles of the lower jaw, is soon relieved and the general condition improved. But there are cases in which not the lymph bodies are the main gates through which constitutional poisoning takes place, but the bloodvessels only. In the incipient stage of such cases the discharge from the nostrils is more or less sanguineous; in them the bloodvessels, thin and fragile, carry the poison inward with great rapidity.

(*To be continued.*)

The ancient Society of Medicine of Strasbourg, together with other Alsatian medical societies, has been suppressed by the German authorities, because the reports were published in French.—*Philadelphia Medical Times.*

THE HOT INTRA-UTERINE DOUCHE IN PURULENT ENDOMETRITIS.*

BY WM. E. MOSELEY, M.D., OF BALTIMORE.

Chronic corpereal endometritis has ever been a stumbling block to the gynecologist, a condition in which, as the result of careful and persistent treatment, the patient would receive some benefit but in which it was unsafe to hint at the *probability of cure*, and the prognosis has always been considered especially bad if there be present a purulent discharge.

I will not speak of the multitudinous methods of treating this condition laid down by authors, all here being as well acquainted with them as I am, but I wish to call your attention to a method of treatment which although not new, has received far less attention than its merits deserve, for in my experience it has been perfectly safe, easy of application, has caused the patient no pain or serious after-symptoms and above all has been promptly *curative* in its effect. I refer to the *free* douching of the uterine cavity with warm, or rather hot water, either plain or medicated.

The water can be injected with a fair amount of force; it reaches all portions of the endometrium, washes the discharge out of the mouth of the glands and so reaches parts that cannot be reached by the ordinary applications and has no destructive effect on the mucous membrane as do the more active caustics.

The important item is to have the cervical canal freely enough dilated to permit a ready exit of all the water injected and in many cases of any considerable standing such will be found to be the case.

I have used a double catheter and have injected directly through a small flexible male catheter and have found both methods equally satisfactory. One thing I would insist upon, and that is the use of a large amount of water, from one to two gallons and at a temper-

*Read before the Gynæcological and Obstetrical Society of Baltimore, May 8th, 1888.

ature of from 100° to 110° F. I have used the water clear and also medicated and both have given me equally satisfactory results.

I have selected four cases to report to-night simply because in these cases when the douche was resorted to all other methods of treatment were stopped. In three of these cases the patient had been for several months upon other methods of approved treatment without marked benefit.

Case I.—Mrs. A., age 26, first menstruated at the age of 17, regular but scanty and some pain in lower abdomen. She had been married five months and three months before being seen had aborted at about seven weeks.

This patient entered the New York Woman's Hospital January 5, 1882, complaining of difficulty in walking and of a pretty free, bad smelling discharge from her vagina. Dr. C. C. Lee made the diagnosis of suppurative endometritis, with *probable specific* vaginitis and bubo.

The bubo was opened and poulticed and the patient put upon carbolized astringent douches three times daily. On January 23, the purulent discharge from the uterus remaining free, Dr. Lee directed that the cervical canal be dilated and the uterus washed out daily with carbolized water. This was done and menstruation appeared immediately after the first washing. There was no return of the purulent discharge after menstruation ceased up to the time of her discharge from the hospital, September 9—a period of nearly eight months.

Case II.—Mrs. R., had been married 19 years, had had three children but no abortions. Last labor 16 years previous. Had not been well since her marriage. Menstruation first appeared at the age of 17, regular but scanty and accompanied by severe abdominal pain and some backache.

She entered the New York Woman's Hospital, Dr. Emmet's service, October 24, 1881, complaining of severe pain of a spasmodic character in the lower abdomen and both hips. There was present a free purulent discharge from her uterus. Conjoined examination by the rectum and vagina showed a hard mass to the right of the uterus. Dr. Emmet was inclined to attribute the discharge to a pelvic abscess opening into the Fallopian tube, and the patient was given hot vaginal douches, together with iodine and glycerine tampons, but on February 11, 1882 as there had been no marked improvement, on the chances of the discharge coming from the endometrium, I was requested to wash out the uterus with warm carbolized water, which I did on three occasions during the latter part of that month. There was no discharge of any account after the first washing and none after the third.

Case III.—Came under my care at the N. W. Special Dispensary, July 13, 1883.

Mrs. A. M., colored age 30. First menstruated at 16 years. Flow recurred at irregular intervals, was scanty in amount and accompanied by slight pain. Seven months before I first saw her she was delivered with instruments of her only child and had been complaining since that time.

Examination showed uterus somewhat enlarged and anteflexed and introduction of the probe caused free bleeding. There was present a free purulent discharge. On July 18 she was carefully curetted with Thomas' dull curette and some fungosities removed. Churchill's tr. iodine was applied to the endometrium. From the middle of July to the first of October she had applications of iodine to the endometrium at intervals of about one week, and was built up as much as possible by means of iron and quinine tonics, but there was no permanent diminution of the purulent discharge. On October 4, the cervical canal was dilated slightly and the uterine cavity washed out with hot water, about six or eight quarts being used. The treatment was followed by no discomfort or worrying symptoms. From the date of operation there was no return of the purulent discharge.

I last saw this patient October 10, 1885, two years after the treatment, when she reported that she continued perfectly well.

Case IV. — Rachel W., colored, widow, age about 60 years came to my private dispensary October 22, 1886, complaining of a sensation of weight and aching in the lower abdomen together with cramp-like pains extending down left thigh and worse at night. Examination showed a senile uterus, two comparatively small polypi attached to the posterior wall of the cervical canal and a free purulent discharge issuing from the uterine cavity. The probe entered the uterus with its point to the right and its withdrawal was followed by a free flow of pus.

The patient was put upon tonics, the polypi removed and hot douches ordered to be used freely.

During the next five months various methods of treatment were resorted to. The endometrium was curetted. Iodine and solution of bichloride of mercury were applied to the wall of the uterine cavity, but with no permanent diminution of the discharge.

In April 1887 this uterus was thoroughly washed out with, I think, a weak bi-chloride solution. When I last saw her, a comparatively short time after the douching, there was no purulent discharge, but she reported last month that although the discharge had not absolutely ceased it had been but very slight in amount since the treatment.

This method of treatment is perfectly rational and is the procedure that any of us would follow in any other cavity containing pus.

I believe that we would get much better results from intrauterine medication if we took the precaution to first *thoroughly* remove all secretions from the endometrium before making any application. This I have tested and with only the happiest result.

A CASE OF CHLOROFORM POISONING.

BY ROBERT HOFFMANN, M.D.,
OF BALTIMORE.

The writer, a short time ago, was hastily summoned at 10 P. M., to attend a gentleman 50 years of age, who fifteen minutes before had swallowed a large tablespoonful of pure chloroform, which he had mistaken for a solution of iodide of potassium. The patient was thoroughly narcotized, no reaction of pupils, pulse small and frequent, respiration deep and very slow, face and extremities cold and a strong odor of chloroform perceptible in the breath. The patient's friends said, that he cried out immediately after swallowing the chloroform, then fell and lost consciousness; later the patient told the writer that as he swallowed the medicine there was an intense burning in his throat, which is all he remembers.

I had all the doors and windows immediately opened to clear the room of the chloroform vapor, then resorted to the stomach pump, experiencing no difficulty whatever in introducing the tube, as there was a total relaxation of the muscles.

The stomach was emptied of its contents and then washed out several times with warm milk, all of which gave forth an intense odor of chloroform. The patient after this, however, showed not the least sign of consciousness, but lay in profound coma, reflexes entirely absent, pulse thready. I then resorted to artificial respiration, which after long and patient endeavors was rewarded by the patient suddenly opening his eyes, for a moment, again relapsing into his former condition; the artificial respiration was continued, supplemented by hypodermic injections of strychnine; after a short time the patient again opened his eyes and attempted to speak.

About 1 A. M., the patient's condition was such that I considered him out of danger, the odor of chloroform could be detected in his breath, he then drank a cup of hot tea with considerable enjoyment. The next day he complained of headache, and an inclination to cough, which, however, gradually passed off. After a few days the patient was entirely well.

This case is interesting, in so far that it shows, that notwithstanding a quantity of chloroform is swallowed, usually designated as fatal, that if it is rapidly eliminated from the organism, life

can be saved. The physician should attempt to remove as rapidly as possible the poison which has not yet been absorbed, both from the alimentary and respiratory tracts. The question confronts him what shall be done first, resort to the stomach pump or to artificial respiration. I would suggest, after this experience, at once make use of the stomach pump, at the same time commencing artificial respiration; as this is the only way in which it is possible to rapidly free the organism of the chloroform. Should these means fail to restore the patient I would practise venesection followed by transfusion; practically I have no experience with these later methods.

The Connecticut Medical Society held its ninety-seventh annual convention this year at New Haven, May 23d and 24th. Dr. George R. Shepherd, chairman of the committee on matters of professional interest in that State made an extended report on the subject of "Albuminuria."

Extensive statistics had been compiled by the committee, from examinations made upon supposed healthy men. Some 35,000 examinations were collected from Life Insurance Companies, and some cases through the officials at Washington, when examinations were made before and after exercise, etc., and the following general conclusions were drawn:

1. Albuminuria is much less frequent in the United States than in England, Stewart giving 31 per cent. as the general average, while ours, conducted upon a much larger scale, shows but 2 per cent.

2. The brain-workers rather than the muscle-workers show the largest percentage of albuminuria.

3. The urine of people rarely shows albumen after food, while those who suffer from dyspepsia and oxaluria, are very liable to show it.

4. Privation, scanty food and clothing with unsanitary surroundings, increase the liability to albuminuria.

5. Cold bathing does increase the liability to albuminuria, though more notably so in case of dyspeptic.

6. Severe exercise increases this liability in a very moderate degree.

7. In the large majority of cases albuminuria is not associated with kidney disease.

8. In the matter of Life Insurance, albuminuria should be looked on as a symptom only, and acceptance or rejection of the risk should depend on the gravity of the cause.

9. The existence of any such condition as physiological albuminuria is extremely improbable.

This report, which was extremely elaborate, reflects great credit upon the committee, and especially on its chairmain, who was peculiarly qualified to investigate this question, not only by reason of his experience as medical examiner for a great Life Insurance Company, but from the unusual facilities which his official position gave him for collating statistics. It is a report which will be extensively quoted in coming literature.

Is Cancer Contagious?—Facts have already been presented which tend to show it to be so. So far, we have only presumptive evidence, but it is quite probable that this will in the near future be changed to certainty.

Dr. Budd writes to the *Lancet*, that a patient of his, who had an epithelioma of the lip and refused operation, owned a terrier dog, which was his constant companion and often licked his face. This dog died before his master, of a cancer of the tongue.

Dr. Clemow has seen in the Royal Hospital of Liverpool, a man who died of cancer of the penis and testicle, apparently contracted in sexual intercourse with his wife, who suffered from cancer of the neck of the womb. Similar cases have been reported.

The case is related of a patient with cancer of the uterus and vagina, who was nursed by a healthy, robust servant who washed all the soiled linen. Six months after the death of the mistress, the servant was received in the North-Devon Hospital, with a cancer in the axilla, of which she died.—*Bul. Gen. de de Thèrap.*, April 15, 1888.

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BALTIMORE, JUNE 16TH, 1888.

Editorial.

THE DIAGNOSIS OF DISEASES OF THE STOMACH BY CHEMICAL MEANS.—Since Bidder and Schmidt made their classical investigations fixing the fact that hydrochloric acid was the only acid secreted from the gastric glands, the only thing of importance in estimating the disturbances of gastric juice secretion now is to find a characteristic and delicate method of testing for free hydrochloric acid. In a series of well-known articles on this subject v. d. Velden recommended certain aniline coloring substances which were changed in color by the presence of hydrochloric acid. In first importance stands methyl violet which is turned blue by hydrochloric acid; since this, a large number of the coloring substances or of components of the coloring substances have been recommended; in the experience of Dr. G. Klemperer (Archiv. f. kl., Med. Bd. xiv. H. 1 & 2, 1888) nothing is better than the methyl group, especially if it be remembered always to evaporate the sample to dryness in all doubtful cases. When it comes to a question of the utility of the reaction of these coloring substances, we are fully justified in accepting the methyl group as a model. Congo red, tropæolin, etc., are inferior to methyl violet. v. d. Velden stated that the methyl reaction (*i. e.* the turning blue of the violet) did not take place and that therefore free hydrochloric acid was not present in the following conditions: in the beginning of digestion, in fever and in carcinoma of the stomach. The last statement aside from its theoretical interest, is of the greatest practical importance, and thus the more recent literature on the value of the color-reaction and the absence of hydrochloric acid is always in connection with carcinoma.

Numerous authors were able to confirm v. d. Velden's statements and especially Riegel in his painstaking work. This statement seems to have received a check by the work of Cahn and v. Mehring. In spite of Bidder and Schmidt, in spite of the extensive work of Maly, there was an undeniable want of clearness in the part played by lactic acid in digestion. It was found that the ordinary test for hydrochloric acid, namely methyl violet was not so certain. Not only free hydrochloric acid but also neutral solutions of NaCl, KCl, NH_4Cl, etc., turn the violet blue, and again the change in color was found not always to take place even when free hydrochloric acid was present, and indeed free hydrochloric acid was found to be present in cases of carcinoma when the methyl violet did not turn blue.

Thus it actually looked as if careful investigation had undermined the results obtained by clinical observation. Renewed investigations were undertaken and some reached the conclusion that methyl violet was not a suitable reagent to test for the presence of hydrochloric acid; others concluded that the hydrochloric acid was in some way changed so that it lost its typical reaction. Riegel and his assistants took gastric juice containing hydrochloric acid from a cancerous stomach and added to it a certain quantity of free hydrochloric acid and analysed these compounds according to the same method. In eight tests he found that all the hydrochloric acid found was less than the sum of the amount of hydrochloric acid present and

that added; that is, a part of the acid seemed to disappear and be lost. From these experiments Hönigmann and v. Noorden concluded that there was no superfluous free hydrochloric acid in the gastric juice. To the superfluous acid, hydrochloric acid was simply added in the artificial mixture, but it was used up for the most part by uniting with bodies for which it had an affinity. This behavior of the hydrochloric acid is only to be explained under the supposition that in the original gastric juice all the free acid united to form other bodies. The question is then, how can the original hydrochloric acid seem to be free in the presence of these uncombined substances, and what other properties does the added hydrochloric acid possess in comparison with that originally present to bring about these compounds?

Klemperer then did some experiments which led him to believe that in the gastric juice of a cancerous stomach the apparently free hydrochloric acid was not free at all, but united. In a cancerous stomach the gastric juice which contains hydrochloric acid with salts of lactic and acetic or butyric acid, freshly added hydrochloric acid can drive out the organic acids from the salts. In every stomach's contents which contain the salts of organic acids, hydrochloric acid added sets in part organic acids free; whether this gastric juice be cancerous or not. This may seem complicated, since the acetates and lactates are present in many stomach contents. Thus the condition is that free hydrochloric acid becomes the chloride of sodium by setting lactic and acetic acid free. In gastric juice from a cancerous stomach there is only a relatively small quantity of the lactates and the acetates present. A change of free acid with these salts, that is, a disappearance of the hydrochloric acid is in this way only possible to a small degree. Klemperer also came to the conclusion that the turning blue of the methyl violet only took place when the hydrochloric acid was not united by bases which were present at the time, either organic or inorganic. When it does not turn blue, it is a sign either that no hydrochloric acid is present or that it is in combination.

In view of the many uncertainties attending the numerous changes which take place in the gastric juice under different circumstances, Klemperer does not seem to have cleared up the difficulty. His conclusions are that when the methyl violet does not turn blue, however much this may support the supposed diagnosis of carcinoma, it cannot be considered conclusive, especially when it is a question of the differential diagnosis between some dyspeptic trouble of the stomach with or without dilatation as well as certain catarrhal conditions.

Suspended Animation in the Infant at Birth.—The subject of suspended animation in the infant at birth is one which sooner or later is brought to the attention of every practitioner of midwifery, yet, while our knowledge of the dangers which threaten the life of the parturient woman is becoming daily more complete, and our means for saving her from them more efficient, it seems as if little progress were made in the study and treatment of this condition, which threatens the life of the child at the very moment of its birth.

This subject has recently (*St. Louis Courier of Medicine*, May, 1888) been brought to our attention by Dr. Gehrung in an article on "Protracted Action of the Heart in Apparent Stillbirth," read before the St. Louis Obstetrical and Gynæcological Society and discussed by its members.

In Dr. Gehrung's case the mother was exhausted by hæmorrhage and the child was delivered feet foremost. The cord which was pulseless, was at once cut and every effort was made to revive the anæmic child.

These efforts failed to excite respiration although for three-quarters of an hour the heart beat so forcibly that its pulsations could be seen from the distance of several feet.

Judging from external appearances all cases of suspended animation in the infant at birth may be readily divided into two classes, the surface of the body being in the one class passively conjested, in the other anæmic.

This classification is further justified by the fact that the prognosis is different in the two classes, being much more favorable in the cases marked by passive congestion.

Post-mortem examinations, however, prove that in both conditions the blood-vessels of the cerebrum are gorged with venous blood, so that the division into these classes is really very superficial.

As to the original cause of the suspended animation, investigators differ very greatly. Some believe that the two states of congestion and anæmia mark two different forms or stages of asphyxia; sudden in the anæmic, slow and progressive in the apoplectic. Others hold that the two conditions are radically distinct; the one produced rapidly by asphyxia the other slowly from heart failure.

Dr. Gehrung states that if a case similar to that above described should hereafter occur in his practice he would try first, inflation of the lungs by a catheter in the larynx and trachea, the gullet being compressed by pressure on the cricoid cartilage and the nostrils closed; second, artificial respiration in some form while the body hung with head downward; and lastly perhaps, transfusion, which he thinks would, on account of the smallness and emptiness of the veins, be very difficult, even if everything could be had in readiness for the operation.

The subject is very fascinating, but evidently very difficult. What is needed is, first, more careful and frequent post-mortem examination of fatal cases, and second, more faithful endeavor to classify clinically the cases which occur, with reference to the circumstances which produce and the phenomena which attend them. We think that the true classification is as follows;

1. The condition, so frequently observed in cases where the circulation in the cord has been prematurely interfered with, in which the surface of the body is passively congested. This condition usually yields to stimulation of the surface, artificial respiration, etc.

2. The same condition further advanced. The surface is pale and bloodless. Here stimulation external and internal, inversion of body with artificial respiration in its various forms may all fail.

3. A condition of general anæmia produced gradually by disease of mother or child or suddenly by hæmorrhage from placenta, cord or body of child. In such a case maintenance of body heat, inversion of body with artificial respiration, stimulation, perhaps transfusion or its substitutes are required.

4. Cases in which serious injury has been done to the great nerve centres, as from contusion of, or hæmorrhage into them. Here no active treatment is of any avail.

We do not forget of course the various diseases or imperfections of the fœtus which may either cause or predispose to the condition of suspended animation of the infant at birth.

Miscellany.

Resolutions on the Death of Professor Wm. E. A. Aiken.—At a meeting of the Faculty of Physic of the University of Maryland, called to take action upon the death of Professor Wm. E. A. Aiken, it was,

Resolved, That the Faculty would hereby express their sense of the high character and of the eminent professional ability of their late colleague, Professor William E. A. Aiken who had for nearly half a century occupied the chair of Chemistry in this University.

Resolved, That they would offer to the family of Professor Aikin the assurance of their sincere sympathy with them in the bereavement with which they have been visited.

Resolved, That a copy of these resolution be entered upon the minutes of the Faculty, and published in two of the daily papers and in the MARYLAND MEDICAL JOURNAL.

J. EDWIN MICHAEL, M.D.,
Dean of the Faculty.

PATHOLOGY AND TREATMENT OF PERTUSSIS.—Dr. Edmund Wendt draws the following conclusions at the close of a paper on this subject:

1. There is constantly associated with whooping-cough a special micro-organism, discovered by Afanasieff.

2. This microbe is a small bacillus, having properties that distinguish it from all other known bacteria.

3. The "bacillus pertussis" (*bacillus tussis conulsivæ Afanasieff*) can be readily demonstrated in the sputum of patients having the disease.

4. While its etiological significance appears established, it does not possess much diagnostic importance, since it is found only after the clinical features of the disease are already well marked.

5. The treatment of pertussis has not yet been materially advanced by this discovery.

6. Antiseptics locally applied do not appear to shorten the duration of the disease.

7. Hygiene and judicious alimentation are, in the present state of our knowledge, of, at least, equal importance with medicinal treatment.

8. Antipyrin and the bromides are reliable symptomatic drugs, and are devoid of danger.

9. A specific has not yet been found.

10. Abortive forms of pertussis may occur, but no plan of treatment now known can claim to have abortive efficacy.

Although I have deprecated the habit of recommending particular drugs on the strength of gratifying personal experience, I cannot refrain from alluding to the use of antipyrin in pertussis. Dr. Sonnenberger, of Worms, was the first to call attention to this new drug in the treatment of whooping-cough. He claimed such surprisingly good results from its employment that my sceptical faculty was immediately fanned into activity. Nevertheless, so far as my own limited experience goes, I must own that antipyrin has with me a better record than any other one drug. I can claim no cures from antipyrin. But what the drug has appeared to me to favor, was an easy course of the disease to final recovery, a mitigation of the paroxysms, especially at night, possibly a reduction in their numbers, and certainly a freedom from complications. This is higher praise than I can conscientiously bestow upon any other method of treatment. But I am far from claiming as much as Sonnenberger, for antipyrin, that author asserting it to be distinctly curative. As to the method of its employment, I have followed the directions of Sonnenberger, who gives one-seventh of a grain to very young children, and gradually increases the dose according to the age of the child. To adults he gives fifteen grains. The medicine is administered three times daily, and sometimes once during the night. Children take it readily when dissolved in a little water and raspberry syrup. The remedy should be continued throughout the attack.—*Medical News*, June 2, 1888.

PHENIC ACID TREATMENT OF VARIOLA.—Dr. Montefusco, of Naples, who during the past two years, since small-pox has been so prevalent, has had excellent opportunities to observe the effects of remedies, writes in the *Bulletin Général Thérapeutique*, April, 1888, that he has found phenic acid as a local application of value in calming local pains and exercising a beneficial effect on the course of the eruption. It is, however, as a remedy for internal use that he praises phenic acid, the adult dose being from one to two drachms in the day, well diluted. The first effect noted is upon the temperature—after a half-gram dose the temperature begins to fall and may go down two degrees. The number of heart beats is at the same time diminished but the force of the beat is increased. This remedy is the only one of many tried by the author which exerts a sure influence on the eruption

itself. This influence consists in the moderation of the extension as well as upon the duration of the eruption. The production of pus is limited and the period of suppuration is shortened. Even when the eruption is confluent this modification is evident. The pustules dry up in a few days and are never accompanied by an extensive swelling of the sub-cutaneous connective tissue. Hemorrhagic small-pox is not benefited to any extent by this treatment. The good results are explained by the antiseptic properties of the drug. In no case were there any symptons of intolerance of the dose or poisonous effects noted, but on the contrary the general condition and feelings of the patients were improved. Albumen in small quantities was occasionally found in the urine, which would become darker after exposure to the air for a time, because of the acid eliminated in it. Nervous affections contra-indciate the remedy's employment.

Malignant Tumors of the Prostate. —Neoplasms are in 90 per cent. primitive. In 10 per cent. they affect children from the age of 1 to 10.

Carcinoma furnishes 86 per cent.

Sarcoma is exceptional.

The connections of the gland and its abundance of lymphatics, explains the almost constant and rapid spread—(diffuse prostato-pelvic carcinoma).

Implication of the bladder is exceptional.

The predominant symptoms are functional disturbances of the urinary apparatus.

Hæmaturia is often absent.

The younger the subject, the more rapid the course.

The evolution varies from three months to five years.

The exploration of the pelvic cavity and the existence of radiating pains, form the best basis for diagnosis.

The gravity of prognosis, and the severity of some symptoms warrant operative interference, but, on the other hand, removal of the tumor is useless, on account of the rapidity of diffusion. Dr. Engelbach, *Thèse de Paris*, 1888.

The American Public Health Association will hold its sixteenth annual meeting at Milwaukee, Wis., November 20–23, 1888.

The executive committee have selected the following topics for consideration at said meeting:

1. The Pollution of Water Supplies.
2. The Disposal of Refuse Matter of Cities.
3. Animal Diseases Dangerous to Man.
4. Maritime Quarantine, and Regulations for the Control of Contagious and Infectious Diseases, and their Mutual Relations.

Mr. Henry Lomb, of Rochester, N. Y., now well known to the American public as the originator of the "Lomb Prize Essays," offers through the American Public Health Association, two prizes for the current year, on the following subjects:

"Practical Sanitary and Economic Cooking Adapted to Persons of Moderate and Small Means."

First prize, $500.

Second prize, $200.

The conditions prescribed are similar to those usual in such contests, and may be learned in detail by any one interested by addressing the secretary Dr. Irving A. Watson, Concord, N. H.

The Leading Ophthalmologists of Paris are all, with one exception foreigners. Dr. Abadie is a Frenchman, Dr. Panas a Greek, Landolt a Swiss, Galeazowski a Pole, De Welcker a German. Landolt is the only one who, in operating for cataract, still uses iridectomy. Dr. L. is in the habit of occasionally making preparatory iridectomy for the extraction of cataract, and in cases of long duration frequently operates when the patient has considerable vision. The old idea of waiting until the patient is blind before the operation is made is about exploded. Dr. De Welcker operates by electric light. Dr. Panas always washes out the anterior chamber with a borated solution after extracting cataract. He makes the extraction without iridectomy and with most beautiful results, making,

perhaps, the prettiest operation of extraction of any man that can be witnessed in all Europe, this being his particular *forte* as operator. Prof. Panas is the only oculist who holds a public clinique, his being a government institution, although all the other oculists have students following them, and the advantages with them are equally good as at the Hôtel Dieu.—*Med. Rec.*

Professor Munter, upon the strength of his personal experience, recommends a daily excursion of three or four hours' duration upon the water as affording a remedy of the greatest value in certain cases of asthma. He regards it as very useful also in anæmia, and remarks upon the longevity and excellent health of seafaring people as confirmatory of his experience.—*Med. Rec.*

Medical Aphorisms.—A correspondent signing himself "Artz," sends to the *Canada Lancet* the following professional aphorisms of Amédée Latour:

1. Life is short, patients fastidious, and the brethren deceptive. 2. Practice is a field of which tact is the manure. 3. Patients are comparable to flannel—neither can be quitted without danger. 4. The physician who absents himself runs the same risk as the lover who leaves his mistress; he is pretty sure to find himself supplanted. 5. Would you rid yourself of a tiresome patient, present your bill. 6. The patient who pays his attendant is but exacting; he who does not is a despot. 7. The physician who depends on the gratitude of his patient for his fee is like the traveller who waited on the bank of a river until it finished flowing, so that he might cross to the other side. 8. Modesty, simplicity, truthfulness!—cleansing virtues, everywhere but at the bedside; there simplicity is construed as *hesitation*, modesty as *want of confidence*, truth as *impoliteness*. 9. To keep within the limits of a dignified assurance without falling into the ridiculous vauntings of the boaster, constitutes the supreme talent of the physician. 10. Remember always to appear to be doing something—above all, when you are doing nothing. 11. With equal, and even inferior, talent, the cleanly and genteely-dressed physician has a great advantage over the untidy one.—*Gaillard's Med. Jour.*

Hæmorrhagic Pharyngitis. — Dr. Arthur Jamison (*Brit. Med. Jour.*), under this title, reports a condition characterized by a sensation of constant tickling in the throat followed by a tormenting desire to clear it. The throat feels dry and burning, and this sensation is increased by swallowing anything pungent. This is followed by a brownish-red expectoration, consisting of buccal squamous epithelium, some small laryngeal cells, a few pus corpuscles, a few blood corpuscles, and large spheroidal pharyngeal corpuscles. In no case were tubercle bacilli found. The pharynx is anæmic in the early stage, afterward in patches is laterally of a dusky red color. There is no follicular disease and the larynx is normal. The liver is generally enlarged and tender. Dr. Jamison is of opinion that the condition is of hepatic origin as "biliousness" and liver engorgement are generally present. As there were no piles he is of opinion that pharyngeal hæmorrhage replaced the ordinary rectal leakage. He paints the throat in the irritative stages with carbolic acid and (℥ss to ℥i). He depends most on the treatment of the hepatic condition. A small dose of blue mass followed by a saline inaugurates the treatment excellently. Alcoholics aggravate the disease.—*Med. Standard.*

The Treatment of Violent Colic.—Capitan prescribes as follows:

Naphthalin . .	¾ gr.
Iodoform . .	⅓ gr.
Tannin . . .	1½ grs.
Antipyrin . .	1½ grs.

In pill form: these amounts may be doubled, and the pills taken as needed. —*Revue de Thérapeutique*, April 1st, 1888.

Medical Items.

Dr. Thomas G. Wroth, a retired physician of this city, died in Darlington, Kent County, June 11th, in the 74th year of his age.

Dr. Arthur G. Watts, a young physician, died Saturday, June 9th, at his residence, 815 West Lombard street, of consumption.

A Sanitary Convention was held under the auspices of the State Board of Health, in Manistee, Mich., June 5 and 6, 1888.

Dr Richard Grady, of this city, reports in the *Dental Cosmos* for June, 1888, an interesting case of "Closure of the Jaws with Recovery."

A British Laryngological and Rhinological Society is to be organized on June 29th. Great Britain now has an obstetrical, gynæcological, ophthalmological, neurological, and medico-psychological societies, and the work of specialization progresses.

The graduation ceremonies of the Johns Hopkins University were held in the Mount Vernon Place Methodist Episcopal Church, Charles Street and Mount Vernon Place, Thursday, June 14, 1888, at five o'clock P. M., for the conferring of degrees upon candidates.

Carbonate of Lithium is best administered, according to Liebreich, in highly charged seltzer or soda water. One grain of lithium, mixed with fifteen grains of sugar will dissolve readily in a wineglassful of carbonated water.

CORRECTION.—34 graduates of the Baltimore College of Physicians and Surgeons have appeared before the Virginia Medical Examining Board since January 1, 1885, and not 33 as stated in a previous issue, and of these only 10 failed to pass successfuly the rigid examination.

Dr. W. D. Booker, of this city, read a paper by invitation before the New York Academy of Medicine at its stated meeting May 23rd, 1888, on "A Study of the Microörganisms in the Stomach and Intestines in the Summer Diarrhœa of Infants." On the same evening a reception was given to Dr. Booker, by Dr. J. Lewis Smith.

Dr. George W. Miltenberger met with a painful accident Tuesday afternoon. As he was coming down stairs he fell, breaking the tendon of the quadriceps femoris of the right leg, just above the patella. Dr. L. McLane Tiffany put the injured leg in a plaster of Paris splint. Dr. Miltenberger is getting along very comfortably, and while his injury may be more painful and tedious on account of his advanced age, his physician and family hope to have him out in a few days. Nothing more serious than a possible stiffness is anticipated. Dr. Miltenberger is 69 years of age.

Dugald Stewart was once asked what was the earliest thing he could remember. He said it was being left alone by his nurse in the cradle, and resolving to tell of her as soon as he could speak. This record, however, does not equal that of the American who remembered that, in his early embryo-life, he had a fear that, perhaps, he might be born a girl.—*Med. Rec.*

Mercenary physicians, who demanded percentages on prescriptions, seem to have existed at a very early date. The famous medical school of Salerno, as early as the eleventh century, obliged its graduates to swear they would not demand or receive percentages on prescriptions. This practice evidently existed in the time of Chaucer for, in his satiric sketch of the physician in the "Canterbury Tales," he says:

"Full ready had he apothecaries
To send him drugs and lectuaries;
For each of them made other to winne,
Their friendship was not new to begin."

The early development of this abuse indicates that the diplomaed "buack" who looked upon medicine as a trade only, is not an offspring of modern degeneracy. — *Medical Standard.*

The American Physiological Society has issued the following preliminary list of papers to be read at the meeting to be held in Washington, D. C., on September 18, 19 and 20, 1888.

On the Therapeutic and Forensic Aspects of Hypnotism. By Dr. G. Stanley Hall.

On Enzymes Comparable with Papain, found in certain fruits of temperate climates. Br Dr. G. L. Goodale.

On the Knee-jerk Phenomena. By Dr. H. P. Bowditch.

On the Nature of the Knee-jerk. By Dr. W. P. Lombard.

On the Effects of Varying Rates of Nerve Stimulation upon the Character of Muscular Movements. By Dr. H. P. Bowditch.

Growth and Death. By Dr. C. S. Minot.

The Cells of the Cortex Cerebri. By Dr. C. S. Minot.

The Uterus During Gestation. By Dr. C. S. Minot.

On the Temperature Limits of the Vitality of the Mammalian Heart. By H. N. Martin.

Histological Changes Produced in Ganglion Cells by Stimulation. By Dr. H. H. Donaldson.

On Fever. By Dr. Isaac Ott.

On the Distribution of Bacteria in Drinking Waters and Public Buildings. By Dr. W. T. Sedgwick.

The Origin and Regeneration of Blood Corpuscles. By Dr. W. H. Howell.

On Certain Ptomaines. By Dr. V. C. Vaughan.

On the Physiological Action of Uranium Salts. By Dr. R. H. Chittenden.

On Myosin and Certain of its Decomposition Products. By Dr. R. H. Chittenden.

On the Influence of Acetanilide or Antifebrin on Proteid Metabolism. By Dr. R. H. Chittenden.

Original Articles.

THERAPEUTICS OF DIPHTHERIA.*

BY A. JACOBI, M.D., OF NEW YORK.

(*Continued from page* 130.)

In a few cases injections are unsuccessful. They are those in which the whole nasal cavity is filled with membranous deposits to such an extent as to require forcible treatment. Sometimes it is difficult to push a silver probe through it. That procedure may be repeated, the probe dipped in carbolic acid, or wrapped in absorbent cotton moistened with carbolic acid of 50 or 90 per cent. After a while injections alone suffice. But now and then the development of pseudo-membranes is very rapid, a few hours suffice to block the nostrils again, and the difficulty is the same.

The liquids which are to be injected must be warm and fairly mild. Solutions of chloride of sodium, two-thirds of one per cent., saturated solutions of boric acid, one part of bichloride of mercury, 35 of chloride of sodium and 5000 of water, more or less, or lime water, or solutions of papayotin, will be found satisfactory. From the selection of these remedies it is at once apparent that the object in view is partly that of washing out, and partly of disinfecting. I have not mentioned carbolic acid, which may be used in solutions of one per cent. or less. Its employment requires care, for much of the injected fluid is swallowed, and proves a danger to children of any age but mostly to the young.

Most of the syringes I find in my rounds are abominations. The nozzle must be large, blunt, and soft. After having recommended for many years the common hard rubber ear syringe the sharp end of which was cut off, I now use always a short stout glass syringe with soft rubber mounting in front.

When the children cannot, or must not be raised, I employ the same solutions from a spoon, or a plain Davidson atomizer. These applications can thus be made while the children are lying down, every hour or very much oftener, without any or much annoyance. The nozzle must be large so as to fit the nostril. A single spray on each side will generally suffice. I am in the habit of covering the common nozzle with a short piece of India-rubber tubing.

For a day or two these injections of fluids or spray must be made hourly. It is not cruel to wake the children out of their septic drowsiness, it is certain death not to do it.

Injections of the nose are oftener ordered than judiciously made. Hundreds of times have I been assured that they had been made. regularly, hourly, for days in succession. Still there was a steady increase of glandular swelling and sepsis. I never believe a nurse to have made them regularly unless I have seen her doing it. They *will* run up their syringe vertically and not horizontally, the fluid *will* return through the same nostril. On the successful injecting or spraying of the nares hangs every life in a case of nasal diphtheria. I have long learned to look upon a neglect to tell at every visit how to make an injection, as a dereliction of duty. This nurse must be made to tell you that at every injection the fluid returns through the other nostril, or through the mouth, or is swallowed.

The procedure is simple enough, and need not take more than half a minute for both nostrils. A towel is thrown over the child's chest up to the chin and the child gently raised in bed by the person who is to make the injection. This person sitting on the bed steadies the patient's head against her chest while somebody else holds the patient's hands. The syringe is introduced horizontally by the person sitting behind the patient and gently emptied. No time must be lost in refilling and attending to the other side. When pain is complained of in the ears more gentleness is required, or the spray, or pouring in from a spoon, or minim dropper

*Read before the Philadelphia County Medical Society, May 23, 1888.

even, has to take the place of the injection.

Many sins are committed in even doing this simple thing. The unfortunate little one is made to see all the preparations and is worried and excited, and the necessary gentleness in the proceedings is neglected. The cases reported by me in a discussion on the local treatment of diphtheria before the Section on Theory and Practice in the New York Academy of Medicine, read as follows :*

"There were two trained nurses, and two children of six and four years. When I saw the little four-year-old the other was dead. Where did he die? His head between the knees of the trained nurse. They had been told Dr. Jacobi ordered nasal injections to be made every hour in such cases. Every hour the unfortunate boy was lugged out of bed, protesting and fighting, and wearing out his little strength in his battle against two trained brutes; had his head rammed between the knees of one of them who was herself comfortably seated on a chair while the other did the rest; and thus the boy was murdered. When I heard that fearful story from the smiling lips of that person, I begged and pleaded, and showed her how to do it gently. A week afterward the doctor told me that the little girl died between the knees of one of the smiling creatures, and neither of them is in the State prison."

What is the concentration in which antiseptic injections should be used? For twenty-five years and more, while employing irrigations and injections frequently, I had used quite weak solutions and felt assured of their efficacy. All at once (when the gospel of the bacteria was being preached) it was claimed that weak solutions were useless and a snare, because antiseptics, and particularly carbolic acid, would not destroy bacteria and bacteria-poisons except in such doses and concentrations as would necessarily destroy blood and tissues first. I felt dismayed, but still continued in my heretic ways, hoping that improved knowledge would finally harmonize theory and practice. So it happened. In the *American Journal of the Medical Sciences* for January, 1881, T. Mitchell Prudden proved that a solution of one-sixteenth of one per cent. of carbolic acid prevents the emigration of white blood-corpuscles under circumstances otherwise favorable to inflammation, and Koch found that though bacteria are not easily killed, their growth is stopped by a solution of one part of carbolic acid in 850, and their activity by one in 1200. These effects are all that is required for practical purposes; thus the frequency of applications is justified by both necessity and safety.

Diphtheritic adenitis, the swelling of the cervical glands near the angles of the lower jaw, to which I have alluded as an ominous symptoms, points to nasal and nasopharyngeal infection. The treatment consists in disinfection of the absorbing surfaces.

Direct local treatment of the glands if not entirely useless, is, at all events, of minor importance and efficiency. Applications of one part of carbolic acid to ten of alcohol, irritate both surface and patient more than they can do good. Inunctions may do some good by friction (massage); inunctions with some absorbable material in them may do a little better. The common iodide of potassium ointment is useless; iodide of potassium in three or five parts of glycerine is more readily absorbed; the same in equal parts of water, with a little animal fat, and six or eight times its quantity of lanolin, gives an ointment which is readily absorbed. Iodine is found in the urine within a few hours. Iodoform may be utilized in the same way. Injections of iodoform in ether, which I suggested some time ago, are too painful. Mercurial inunctions, those of blue ointment, require too much time for any effect to take place. Oleates are too irritating locally; a lanolin ointment would prove more satisfactory. After all, however, the readiest method of reducing the swelling of the glands, and improving the prognosis accordingly, is that of cleansing and disinfecting the field of absorption. The rare cases of

*N. Y. Medical Record, 1887, p. 403.

suppuration in these glands require incision and disinfection. They are as ominous as rare however. There is but little pus, as a rule, but one or many local deposits of disintegrated gland cells and gangrenous connective tissue. The incisions must be extensive, the scoop and concentrated carbolic acid must be freely used. In these cases hæmorrhages may occur, some of them very difficult to manage. I have seen some of them terminate fatally. In these carbolic acid must be avoided. Compression, actual cautery, and acupressure, have rendered good service. Solutions of iron must be avoided, for the scurf formed is a shield behind which deleterious absorption is going on constantly in such wounds, as it does in the uterus.

Besides sepsis, the great dangers in diphtheria are heart failure and strangulation. The latter has its own indication, to which I shall not allude to-day. Heart failure exhibits itself sometimes quite suddenly, but, as a rule, it is foreshadowed by a gradually increasing frequency, weakness of heart-beats and pulse and the equal length of the intervals between the feeble systole and diastole, and diastole and systole. This equality is always a dangerous symptom. Heart failure is due, besides the influences common to every fever, to myocardial changes. These may depend on the septic decomposition of the blood, and the ill nutrition of the heart-muscle depending thereon, or the direct diphtheritic changes of the tissue, or both. These changes and dangers set in, sometimes, at a very early period. Thus whatever enfeebles must be avoided. Patients must be spared every unnecessary activity. They must remain in bed, without excitement of any kind, take their meals, and evacuate their bowels in a recumbent or semi-recumbent position; crying and worrying must be avoided; the room kept airy, and rather dark, so as to encourage sleep, if the patient be restless. In no disease, except, perhaps, in pneumonia, have I seen more fatal results from sudden changes of posture, or from exertion. Unless absolute rest be enforced, neither physician nor nurse has done his or her duty.

The threatening feebleness of the heart yields a positive therapeutical indication. In no disease is the danger greater from the side of the heart, in no disease is the indication for sustaining and strengthening the heart more positive from the beginning. Digitalis, strophanthus, spartein, besides camphor, alcohol, and musk, must not be postponed until feebleness and collapse have set in. It is possible or probable that they will appear; and it is certain that a cardiac stimulant will do no harm. It is safe, and advisable to use them at an early date. That is particularly necessary when antipyrin or antifebrin is given. A few grains of digitalis, in a palatable and digestible form, may, or must, be given daily. When a speedy effect is required, one or two doses of from two to four grains are not too large, and must be followed by smaller ones. When it is justly feared that the effect of digitalis may be too slow, I give, with or without the former, sulphate of spartein. An infant a year old will take one-tenth of a grain four times a day, as a matter of precaution, and every hour or every two hours in an emergency.

Of at least the same importance as cardiac tonics are alcoholic stimulants. The advice to wait for positive symptoms of heart failure and collapse before the life-saving apparatus is employed, is bad. There are cases which get well without treatment, but we do not know beforehand which they will do. No alleged mild case is safe until it recovered. When heart failure sets in—and often it will occur in apparently mild cases—our efforts are often in vain. Thus alcoholic stimulants ought to be given early, and in large quantities, though amply diluted. There is no such thing as intoxication or danger from it, in septic diseases. A few ounces daily may suffice, but I have seen ten ounces daily of brandy or whiskey save children who had done badly with three and four.

Coffee is a good stimulant for the heart. Camphor may be employed to great advantage for the same purpose. from five to twenty-five grains may be

given daily, as camphor water, or in mucilaginous emulsion, which is easily taken. It does not upset the stomach as ammonium carbonate is liable to do. It may be employed subcutaneously when a rapid effect is aimed at, in five parts of oil, which is milder and more convenient than ether.

But the best internal stimulant, in urgent cases, is Siberian musk, in powders, or with mucilage. When required at all it ought to be given in sufficient doses, at short intervals. When ten or fifteen grains administered to a child one or two years, will not accomplish, within three or four hours, a return of a more satisfactory heart's action, the prognosis is very bad.

Besides exhaustion at the height of the disease, we have paralysis during convalescence, or intense anæmia long after apparent recovery. This anæmia may be general, or is local, and then mostly cerebral.

Diphtheritic paralysis, though of different anatomical and histological origin, yields in all cases a certain number of identical therapeutical indications. These are: The sustaining of the strength of the heart by digitalis and other cardiac tonics. A child of three years may take daily, for a month, three grains or its equivalent; for instance, one grain of the extract. This is an indication on which I cannot dwell too much. Many of the acute, and most of the chronic diseases of all ages, do very much better by adding to other medications a regular dose of a cardiac tonic. It is true that it is a good practice to follow the golden rule to prescribe simply, and if possible a single remedy only, but a better one is to prescribe efficiently. A prescription paper with a single line on it looks well, but a readily convalescent or well man, looks better.

Besides, there are some more indications: Mild preparations of iron, provided the digestive organs are not interfered with. Strychnia or other preparation of nux vomica at all events. In ordinary cases a child of three years will take an eightieth of a grain three or four times a day. Local friction, massage of the throat, of the extremities, and trunk, dry or with hot water, or oil, or water and alcohol; and the use of both the interrupted and continuous currents, according to the known rules, and the locality of the suffering parts, find their ready indication. The paralysis of the respiratory muscles is quite dangerous; the apnœa resulting from it may prove fatal in a short time. In such cases the electrical current used for very short periods, but very frequently, and hypodermatic injections of sulphate of strychnia in more than text-book doses, and frequently repeated, will render good service. I remember a case in which these, and the occasional use of an interrupted current, and occasional artificial respiration by Sylvester's method, persevered in for the better part of three days, proved effective.

Chloride of Iron.—I am still, as I was in my first paper on diphtheria, in 1860, an advocate of the internal use of chloride of iron. Its mode of administration I have not changed much these twenty years. In a public lecture delivered before a New York audience, by an European authority, whose name has lately appeared a little more prominently in the newspapers than an American physician would wish, I was highly praised for giving a few drops of the tincture of the chloride of iron a few times a day. This eulogy I have always tried not to deserve, for the efficient method of its administration is not that. The chloride of iron is an astringent and antiseptic. Its contact with the diseased surface is as important as is its general effect; therefore it must be given frequently, in hourly or half hourly doses, even every twenty or fifteen minutes. An infant of a year may take three or four grammes a day, a child of three or five years eight or twelve. It must be mixed with water to such an extent, that the dose is half a teaspoonful or a teaspoonful; a drachm in four ounces allows half a teaspoonful every twenty minutes. No water must be drunk after the medicine. As a rule it is well tolerated. There are some, however, who will not bear it well. Vomiting or diarrhœa is a contraindication to persevering in its use, for nothing

must be allowed to occur which reduces strength and vigor. A good adjuvant is glycerine, better than syrups. From ten to fifteen per cent. of the mixture may consist of it. Now and then, but rarely, it is not well tolerated either. When diarrhœa sets in glycerine must be discontinued. Still these cases are rare; indeed, the stomach bears glycerine very much better than the rectum. In the latter, the presence of a small dose of glycerine is known sometimes to produce large evacuations, a result appropriated and utilized by an advertising nostrum monger.

In connection with this remedy, I wish to make a remark of decidedly practical importance. I know quite well that recovery does not always prove the efficacy of the remedy or remedies administered. But I have seen so many bad cases recover with chloride of iron, when treated after the method detailed above, that I cannot rescind former expressions of my belief in its value. Still, I have often been so situated that I had to give it up in peculiar cases. These are such in which the main symptoms are those of intense sepsis, I should say such in which the iron and other rational treatment was not powerful enough to prevent the rapid progress of the disease. Children with naso-pharyngeal diphtheria, large glandular swelling, feeble heart and frequent pulse, thorough sepsis, and irritable stomach besides, those in which large doses only of stimulants, general and cardiac, can possibly promise any relief, are better off without the iron. When the circumstances are such as to leave the choice between iron and alcohol, it is best to omit the iron and rely on stimulants mostly. The quantities required are so great that the absorbent powers of the stomach are no longer sufficient for both.

Nor is iron sufficient or safe in those cases which are preëminently laryngeal. To rely on iron in membranous croup means waste and danger.

Mercury.—The first volume of *A System of Practical Medicine by American Authors*, which appeared in 1885, contains in an article on diphtheria, written in 1884, the following remarks on page 705:

"Not all cases of diphtheria are septic or gangrenous, nor are all the cases occurring during an epidemic of the same type. Some have the well-pronounced character of a local disease, either on the tonsils or in the larynx. The cases of sporadic croup, met with in the intervals between epidemics, present few constitutional symptoms, and assume more the nature of an active inflammatory disease, very much like the sporadic cases of fibrinous tracheo-bronchitis. These are the cases in which mercury deserves to have friends, apologists, and even eulogists. Calomel, 0.5–0.75 gramme (grs. viii–xii) divided into thirty or forty doses, one of which is taken every half hour, is apt to produce a constitutional effect very soon. Such, with minute doses of one milligramme (gr. $\frac{1}{60}$th) or more, of tartar emetic, or ten or twenty times that amount of oxysulphuret of antimony, have served me well in acute fibrinous tracheo-bronchitis. But the mucous membrane of the trachea and bronchi is more liable to submit to such liquefying and macerating treatment than the vocal cords. The latter have no muciparous glands like the former, in which they are very copious. And while the tracheal pseudo-membrane, though recent, is apt to be expelled through a tracheal incision at once, that of the vocal cords takes from six days to sixteen or more for complete removal. Still, a certain effect may even here be accomplished, for maceration does not depend only on the local secretion of the muciparous glands, but on the total secretion of the whole surface, which is in constant contact with the whole respiratory tract. Thus either on theoretical principles, or on the ground of actual experience, men of learning and judgment have used mercury in such cases as I detailed above, with a certain confidence."

"If ever mercury is expected to do any good in cases of suffocation by membrane, it must be made to act promptly. This is what the blue ointment does not. In its place I recom-

mend the oleate, ten or twelve minims of which may be rubbed into the skin along the inside of the forearms or thighs, or anywhere else when those surface become irritated, every hour or two hours. Or repeated doses will be useful such as mentioned before, or hypodermic injections of corrosive sublimate, in one-half or one per cent. solution in distilled water, four or five drops from four to six time a day or more, either by itself or in combination with the extensive use of the oleate or with calomel internally. Lately, the cyanide of mercury has been recommended very strongly. I hardly believe that it will work more satisfactorily than any other equally soluble preparation. Within the past few years the internal administration of bichloride of mercury has been resorted to more frequently and with greater success than ever before.

"My own recent experience with it has been encouraging, and so has that of some of my friends. Wm. Pepper gave one thirty-second of a grain of corrosive sublimate every two hours in a bad form of diphtheritic croup, with a favorable result. But in this very bad case, desperate though it was—child of five years, respiration 70, pulse 160—large membrane 'evidently from the larynx' had been expelled before the treatment was commenced on the seventh day of the disease. The solution ought to be given in solution of 1:5000 and in good doses. A baby, a year old, may take one-half grain every day many days in succession, with very little, if any, intestinal disorder, and with no stomatitis. A solution of the corrosive sublimate in water is frequently employed of late as a disinfectant. It acts as such in a dilution of 1 in 20,000. As healthy mucous membrane bears quite well a proportion of 1:2000 or 3000, any strength between these extremes may be utilized. A grain of the sublimate in a pint or more of water, with a drachm of table salt, will be found both mild and efficient. As a gargle and nasal injection it will be found equally good. But it has appeared to me that frequent applications give rise to a copious mucous discharge; hourly injections into a diphtheritic vagina become quite obnoxious by such over-secretion, which ceases at once when the injections are discontinued. Thus, when it is desirable not only to disinfect, but also to heal the diseased surface, the injections with corrosive sublimate appear to yield a result inferior to less irritating applications."

These remarks of 1884 constitute what I consider a great progress over the statements of my treatise on diphtheria, 1880, which are more cautious and negative. Extensive experience with the remedy increased my favorable opinion of its efficiency to such an extent as to induce me to publish a number of cases and conclusions in the *Medical Record* of May 24, 1884.

They have been amply justified by the observations of the last four years, so that I am fully prepared to commit myself to the following statements: My conviction of the utter uselessness of internal medication in laryngeal diphtheria, membranous croup, is strongly shaken. The mortality of 90 or 95 per cent. of the cases not operated upon has no longer existed these five or six years, in my observation. The above figures were by no means taken from small numbers. For since 1860 I have tracheotomized more than 500, perhaps 600, times, have assisted in as many more operations, and seen at least a thousand cases of membranous croup which were not operated upon at all. During the last six years I have seen no less than 200 cases, perhaps many more. Amongst them, recoveries have not been rare. In the practice of no less a man than O'Dwyer, I have seen two cases of general and laryngeal diphtheria in the same family which got well without any operative procedure. Such recoveries have taken place in all ages, from four months upward. The uniform internal medication consisted in the administration of the bichloride of mercury. The smallest daily dose was a quarter of a grain (15 milligrammes). Half a grain daily continued through five or six, sometimes eight, ten, or even twelve days, has not been rare amongst children of from three to six years. The doses

varied from one-sixtieth to one-fortieth of a grain, and sometimes more. They are given every hour. They require the dilution in a tablespoonful of water, or other compatible fluid, for instance milk, in order to be quite innocuous. They are not liable to produce gastric or intestinal irritation. When the latter occurred, it was generally found that by some mistake the solution was as strong as 1 : 2000 or 1 : 3000. In the few cases in which it did exist, or was believed to result from the remedy, a few minims of camphorated tincture of opium administered with every dose, for a short period, proved sufficient to check it. The beneficial effect of the remedy depends greatly on the time of its administration. As a rule, such complete stenosis as necessitates surgical interference, develops after days only. This necessity is often obviated by the remedy when given as detailed. When an operation is required after all, the treatment must be continued. I have never since 1863 seen seen so many cases of tracheotomy getting well as between 1882 and 1886, when the bichloride was constantly used as mentioned. Nor am I alone with these observations. I can name a dozen of New York physicians, some of whom have performed tracheotomy, who can confirm the above statements from their own observations. Nor does the opinion of those differ who constantly perform intubation. I know that O'Dwyer, Dillon Brown, and Huber have come to the same conclusions, the latter having been a successful tracheotomist before he earned his laurels with intubation.

My experience in regard to the efficacy of the bichloride of mercury is mainly gathered in cases of laryngeal diphtheria and a limited number of fibrinous bronchitis. It is there where it has been particularly effective. Still I must not say that that they were localized affections. These, with us, are but very scarce. Our cases of diphtheritic laryngitis are mostly decreasing, and complicated with either diphtheritic pharyngitis or rhinitis, or both. Not a few, mainly of the latter kind, exhibit constitutional symptoms, sepsis. But cases of that kind also I have seen getting well. One of the most interesting was that of a girl of seven years whom I saw a single time in consultation with Dr. J. Anderson. There was nasal and pharyngeal diphtheria, cervical adenitis, and some laryngeal stenosis. I reccommended an hourly dose of one-fortieth of a grain of bichloride, which she took for ten days, also nasal injections of the same, one grain to a pint. They were made hourly for many days, and altogether continued for more than a fortnight, for the patient lived so long, and is still alive. She swallowed almost all the nasal injections, and great was my surprise when after some weeks I received the report of the case and learned that about twenty grains of the bichloride had found their way into the stomach of the little girl. She lived, had but little stomatitis, and hardly any intestinal irritation. If the case does not prove anything else, it proves this, that even desperate cases will get well; this case got well with the bichloride of mercury, and resembles all the other cases in this that after the rational and careful administration of solutions of hydrargyrum bichloride, local mercurial symptoms about gums, mouth, pharynx, and intestines are extraordinarily rare in infancy and childhood.

INTUBATION TUBES.*

BY JOSEPH O'DWYER, M.D.,
OF NEW YORK CITY.

[Before reading his paper Dr. O'Dwyer exhibited tubes with a metallic attachment to replace the epiglottis in swallowing, one of them being so arranged with a spring that the finger might be introduced behind it as an extractor.

In order to illustrate through how small a space breathing can occur, he exhibited a specimen from a case in which there had been no choking of voice or other sign of laryngeal involvement.

*Read before the Philadelphia County Medical Society, May 23, 1888.

Many fear that the tube will slip through into the trachea. A tube was exhibited *in situ*, in a three year old larynx, showing that this accident cannot occur if the proper size of tube for the age be employed.]

The testimony of tracheotomists from the time of Bretonneau, has been uniformly in favor of canulas of large calibre. I have failed to find a single dissenting opinion on this question, yet very few have given any reason in support of their conviction, or entered into any arguments whatever on the subject, probably because they considered that none were necessary, as it appears so very reasonable that the artificial channel should approximate as nearly as possible to the normal lumen of the air-passages.

I will refer to a few of the authorities on this subject before giving the reasons that led to the adoption of laryngeal tubes of so much smaller calibre than those generally used in the trachea.

If a large opening be preferable in one situation it certainly is in the other the same arguments applying to both.

Bretonneau, for some reason which I have not been able to find, came to the conclusion that the canulas which he first devised were not large enough, and laid down the rule that

"The artificial conduit should always have at least the normal diameter of the glottis of the subject."

"Trousseau endorsed this as an excellent precept, which should never be forgotten."

"Steiner says that as large a canula as possible should be used.

"The first point of importance insisted on by West, as influencing the result of tracheotomy in croup, is the use of a large canula."

The author of the article on croup in Holmes's *System of Surgery*, says that

"As a general rule, both openings in the canula should be sufficiently large to admit as much air as would pass through the rima glottidis in health."

The following is from Reynold's *System of Medicine:*

"No tube with less than a quarter of an inch in diameter is sufficient to carry on respiration. At a year old such a tube cannot be introduced into the trachea, it would not be tolerated at two years old, so that at these ages some other means must be looked for to secure a passage for the air."

This author then discusses the question as to whether the want of success with tracheotomy in very young children is not due to the inability to secure a large enough opening.

In answer to such assertions as the above, it is only necessary to state that the diameter of the lumen of the trachea at a year old is scarcely a quarter of an inch, and, furthermore, an adult can breathe comfortably while at rest through an opening of this size. I have at present a man under my care who has been wearing a canula in the trachea for the last seven months, the bore of the inner tube being exactly one-fourth of an inch in diameter. During part of this time he was obliged to breathe exclusively through the artificial opening, but then the least exertion, such as walking across the room, was sufficient to induce dyspnœa.

Nature supplied this patient, who is of large stature, with a breathing tube at least seven-eighths of an inch in diameter, and the surgeon substituted one having a breathing capacity of something less than one-twelfth of this. In other words, the area of a cylinder seven-eighths of an inch in diameter is a little more than twelve times that of one a quarter of an inch in diameter.

Had the surgeon who operated in this case placed himself on record, he must have taken extreme grounds in favor of small canulas.

Trousseau advocated larger canulas than were first used, on the ground that in some cases the improvement that at first succeeds the operation of tracheotomy soon gives place to a return of the dyspnœa, and attributes this result to the inadequate size of the canula employed, which does not provide for the permanent admission of a sufficient quantity of air. In illustration of this fact he says,

"Place a quill in the mouth, and closing the nostrils, endeavor to breathe.

entirely through it; at first you breathe easily enough, but soon your respiration becomes laborious, and at length you are fain to throw away the quill, and with open mouth once more to fill the lungs completely."

I have tried this experiment with a quill, the diameter of which was three-sixteenths of an inch, and could breathe through it for over five minutes without much discomfort, yet it represents in numbers only the twenty-second part of the area or capacity of my trachea, estimating the diameter of the latter at seven-eighths of an inch.

If we now construct a canula in the same ratio for a child of five years, the diameter of whose trachea is one third of an inch, it gives a calibre of three-thirty-fourths of an inch in diameter, an opening about as large as the head of an ordinary sized pin. Trousseau's illustration, therefore, fails to sustain his argument in favor of larger tubes, as it is certain that canulas as small as this were never used.

A more reasonable explanation of the return of the dyspnœa before the elapse of sufficient time for the extension of the disease, would be the entrance of blood, or the accumulation of secretions, because it occurred in only some cases, while if due to the inadequate size of the canula it should not have occurred in all.

In my early experiments with intubation, the tubes had about the same calibre as those generally used for the trachea, but in order to avoid injury to the vocal cords, which I feared more than anything else, it was necessary to give them the oval or elliptical, instead of the cylindrical form. A few of these early forms I here show you. There was ample room, both in the glottis and trachea, for tubes of this size and shape, but I was not then aware of the hour-glass constriction that exists just below the vocal bands until it was demonstrated by the presence of ulceration through the whole thickness of the mucous membrane, corresponding to the long diameter in every case in which the tube was retained for any considerable time.

This defect could be remedied in only one of two ways, viz., either by diminishing the long diameter at the expense of the lumen of the tube, or by giving it the cylindrical form. The latter, by increasing the pressure on the vocal cords, would endanger their integrity, and I therefore adopted the former, and as a result, the calibre of the tubes as at present constructed is probably less than half the original dimensions.

The small calibre, consequently, was a matter of necessity, and not of choice, and if the larynx would tolerate no larger without injury, any further argument, as far as intubation is concerned, would be useless. But from the fact that I have failed to find any ulceration at the points above indicated from the tubes as now made, I am satisfied that the cutting down process was carried further than necessary, and if demonstrated, that a larger opening would give bitter results, this could be obtained without danger to the vocal cords by an increase of the transverse as well as the antero-posterior diameter. The bore of the smallest tube while still in the cylindrical form, which is intended for infants of one year and under, is exactly one-eighth of an inch in diameter. When we consider the size of the trachea at the same age, the disparity is not very great, and still less when compared with the subglottic division of the larynx, which is the narrowest portion of the breathing tube. This part of the larynx being completely surrounded by cartilage, is not subject to any variations in the normal condition, while the chink of the glottis may be greater or less, according to the position of the vocal cords.

I have found that in the adult the diameter of the lower division of the larynx is from one-eighth to three-sixteenths of an inch less than that of the trachea, which reduces the breathing capacity about one-third. I have not made any similar measurements in children, but by comparing a section from the cricoid cartilage placed beside one from the trachea, it does not appear that the area of the former is more than one-half that of the latter; in other words, the disparity is greater in children than in adults.

In the preceding calculations I estimated on the size of the trachea, simply because it was more convenient, but it is evident that in order to arrive at correct conclusions, we must compare the lumen of the canula with that of the infraglottic division of the larynx, because the trachea would conduct air to and from the lungs just as well were it no larger than its mouth.

But, as I have already stated, it was not from any such comparisons with the normal calibre of the larynx that the tubes have reached their present dimensions, but from nothing the results of pressure on the intensely inflamed and infiltrated tissues as found post-mortem.

After an experience with tubes of various sizes in over two hundred cases of croup, besides other forms of stenosis in children, I am fully convinced that, as at present constructed, they afford ample room for carrying on the respiratory function in the most perfect manner.

When the disease is confined to the larynx and upper portion of the trachea, it is not an uncommon experience after the paroxysm of coughing that immediately succeeds intubation has subsided, to find the little patient breathing so quietly and imperceptibly that it is sometimes difficult to convince the mother, who has returned to the room after an absence of fifteen or twenty minutes, that her child is still living. Such complete freedom of respiration would be impossible were the opening too small.

When the struggle for breath has continued long enough to produce extreme exhaustion, together with more or less atelactasis and congestion of the lungs, this perfect relief does not occur. The same is true after the partial asphyxia induced by prolonged or repeated attempts to insert the tube. Such cases sometimes never rally, although air enter the lungs in the freest possible manner.

If any dyspnœa whatever remain for any considerable time after intubation, or if the respiration be much above the normal in frequency, it indicates the presence of some complication or extension of the disease below the tube. The fact that several times on removing a tube from the larynx I have found its calibre considerably reduced by firmly adherent secresions, when there had been no dyspnœa to indicate it, is good evidence that there is more room than is actually required for the free entrance and exit of air.

Physiology teaches us that the muscular system is the great consumer of oxygen, and that when this system is at rest the consumption of oxygen is reduced to a minimum. It has been estimated that as much oxygen is consumed during one hour of active exercise as would suffice for hours in a state of repose, with food, and for six hours without food. On purely physiological grounds, therefore, if only one-fourth or one-sixth of the amount of air is required in a state of rest, a canula bearing this proportion to the normal lumen of the air passages should afford ample room for the perfect performance of the respiratory function without the least effort whatever.

There would be no point in trying to dertermine through just how small a fraction of the normal lumen of the air passages it is possible to carry on respiration effectually, if the only object to be accomplished by the artificial channel were to allow the free passage of air to and from the lungs. There would then be no room for argument, as there could be no objection to having the canula many times larger than necessary for this purpose, for such exists in the normal condition. I will add further, that were there no abnormal secretions to be gotten rid of, there would still be no reason for difference of opinion on this question.

The only ground left for argument, therefore, is the manner in which the machinery concerned in the removal of secretions is modified or injured by a canula in the larynx or trachea.

The mechanism of coughing, as I understand it, is simply getting as much air into the lungs as possible, condensing it, and allowing it to escape suddenly, on the same principle as the air-gun. To accomplish this, the glottis is firmly closed, coincidently with spasmodic

contraction of the expiratory muscles, until the imprisoned air is sufficiently compressed, not only to give it power to project any offending substance before it like the ball from an air-gun, but also to increase the friction between it and the lining membrane of the air-passage to such a degree as to scrape off, so to speak, secretions that may be adherent.

Considerable condensation with great velocity of the expired air are, therefore, necessary to give the maximum expulsive power. The latter without the former would accomplish nothing, because the same volume of air can be driven through the open or half-open glottis just as rapidly as in the act of coughing, without the least power to remove a particle of mucus even from the larynx, much less from the bronchial tubes. This can be demonstrated by trying to cough while retaining the vocal cords in the expiratory position—the lack of power resulting solely from inability to compress the air to any appreciable extent.

Coughing through a canula is identical with the act when performed with a partially open glottis, and the only means left of subjecting the air to any condensation whatever is the much shorter time occupied in expelling it through the same space by which it more slowly entered.

An excellent and forcible illustration of this argument, and one the mechanism of which is identical with that of coughing, is the familiar act of blowing the nose. There is little or no ability to remove secretions from this organ without first reducing the nostrils to a small fraction of their normal calibre, or by momentarily producing complete occlusion, as in closing the glottis, until the air is sufficiently condensed to force the secretions out with it. Very little power can be developed even by closing one nostril and forcing all the air through the other, if normally patulous. If secretions can be removed more effectually from the air passages through a canula of the dimensions advocated by the authorities already quoted, for the same reason it should be easier to remove accumulations from the nose without compressing the nostrils.

I claim, therefore, that while the artificial opening must be large enough for the perfect performance of the respiratory function, the power to expectorate is still further diminished, and in exact proportion to its increase beyond this limit.

Society Reports.

THE CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD MAY 4, 1888.

The 210th meeting was called to order by the President Dr. N. G. Keirle in the chair.

Dr. Herbert Harlan read the first paper on

THE TREATMENT OF CORNEAL ULCER WITH ESERINE.

Dr. Samuel Theobald said that he was very much interested in the paper of Dr. Harlan, especially in its bearing on this particular class of cases. He had never used eserine in this connection. Atropia had been the remedy he usually employs, but it was usually tedious in its results. He was glad to know that there was a remedy apparently more efficacious.

Dr. J. T. Wiltshire said that he once treated a case of corneal ulcer with atropia, which, in a short time produced much pain. Examination showed that the tension was considerably increased. He then suspected cyclites and decided to use eserine. He did so and it produced marked benefit. The therepeutic action of this drug is interesting in these conditions. It is used to contract the pupils and how it brings about relief is hard to say. He thinks probably it paralyses the secretory nerves, prevents their action and thus relieving the tension.

Dr. Hiram Woods said the paper of Dr. Harlan was very clear in treating the subject and there was little else to be said regarding it. It is an interest-

ing point to find out how eserine acts in this way. We attribute the relief gotten from atropia to the fact that probably a secretory action behind the pupil is lessened after dilatation. But eserine contracts the pupil and this is an opposite condition. Relief here may be due to the action of the drug in promoting drainage from the channels. If there is any danger of iritis or of perforation the use of the drug should be suspended. He had a case last fall where there was a crescentic ulcer present which was on the verge of perforation. He was called away at the time and some one put eserine into the eye. Perforation occurred and an iridectomy had to be performed for relief.

Dr. Samuel Theobald said he thought it would depend a good deal upon the situation of the ulcer in determining its treatment. If it is situated near the margin of the cornea it is best to use eserine. If nearer the centre atropia would be preferable.

Dr. Herbert Harlan, in reply to a question from Dr. Gardner, said no spasm of the ciliary muscles was observed when eserine was used after atropia. He also stated that the number of cases he had reported was greatest in October, possibly because that was the beginning of the oyster season, as twelve cases out of eighteen were caused by oyster shells. In any case where the tension is less than normal it is well to use eserine all the time.

Dr. Hiram Woods said that in some cases an operation to evacuate the anterior chamber and relieve the tension will bring about good results earlier than any remedy. When a crescentic ulcer is about to perforate he would think that this simple operation would be preferable to anything else in accomplishing relief.

Dr. A. K. Bond read a very interesting paper on

HEGAR'S TEST FOR EARLY PREGNANCY.

Dr. B. B. Browne said that he was very much interested in the paper of Dr. Bond. He is correct in the statement that the rectal examination will reveal a good deal in determining the state of the uterus, but a vaginal examination will give about the same results. It is true that the rectal will enable us to come in contact with the posterior wall of the uterus. Bimanual palpation in some cases will give us all we desire in determining whether or not pregnancy exists. This sign of Hegar adds one other test to the number we already have, some of which are more reliable than that. The softening of early pregnancy is easily recognized. The most reliable means of its detection is the blue discoloration of the cervix and vagina and the test with the thermometer. In the early months of pregnancy the rise of temperature in the cervix is about one degree. Between the cervix and vagina it is about one-half of a degree. In cases where the fœtus is dead it falls about one degree. In regard to the existence of the third sphincter Dr. Chadwick has recently written a paper in which he fully describes its presence. In cases where tumors and pregnancy exist at the same time this test of Hegar will not be reliable and also in conditions where the uterus is drawn up high in the pelvis. The blue discoloration and the thermometer are infallible signs.

Dr. Samuel T. Earle said that rectal men had given up the idea of the presence of the third sphincter. It is only an irregular contraction of circular fibres and not a distinct muscle.

Dr. B. B. Browne said that the addition of the posterior ligaments give a sensation to the touch of a sphincter. He once had a case of a woman who, while in third month of pregnancy, was struck in the abdomen and never afterwards was she able to feel the movements of the child. She became alarmed and applied to him to know whether the child was dead or not. The thermometer was introduced into the cervix and the temperature showed a fall of one degree below the normal. The same result was gotten in another similar case. There is no risk in bringing on an abortion unless we penetrate the the uterine cavity. These results were reported in the Transactions of the Medi-

cel and Chirurgical Faculty of Maryland in 1880.

Dr. A. K. Bond said that his reason for writing a paper on this subject was to bring out in English the exact methods practiced by Hegar indetermining the existence of pregnancy. So far as American authors are concerned they had failed to do this heretofore. He thinks the test is a valuable one as it throws another ray of light on the subject of early pregnancy. He had examined several women at the clinic of Dr. Browne and was sure that in some he felt the soft spot referred to.

Dr. R. N. Hall read the next paper on

A CASE OF INTUSSUSCEPTION TREATED WITHOUT OPERATION AND FOLLOWED BY RECOVERY.

Dr. Randolph Winslow said that if the diagnosis of intussusception was the correct one Dr. Hall ought to have gotten some evidence of sloughed gut. The mortality of this affection is about 70 per cent. Usually there is a discharge of fluid and blood. A tumor is apt to be present, etc. The large mortality in these conditions hardly justifies us in waiting for a spontaneous cure. If the disease is clearly made out it is then time to operate.

Dr. S. T. Earle said he thought from the array of symptoms related by Dr. Hall that he was perfectly justified in making the diagnosis of intussusception.

Dr. L. McLane Tiffany said that in the absence of the sloughed gut the diagnosis of intussus ception must remain in doubt. There are a number of conditions that would give rise to these symptoms. The discharge of bloody mucus is one of the few symptoms that will point to a pathological condition, especially so when it occurs in children. He then related two case of

LAPAROTOMY FOR PURULENT PERITONITIS.

Case I.—Male, æt. 21 years, barber by occupation, temperate in habits. Was taken suddenly; went to stool, became faint and vomited. He supposed he had colic and procured some medicine for it. This he took but could not retain it. Feeling ill he went home the next day (Thursday) and sent for his physician, who found on making an examination that the patient's belly was very tender and he gave him a purge which acted freely. The next day he felt better, temperature and pulse normal. On Saturday his belly was not swollen and his temperature and pulse still remained normal. Sunday his temperature and pulse were normal, but the abdominal walls were found to be stiff and hard. He had vomited during the night. A large injection was given by the bowel with no effect. Temperature 99°, pulse 90. The suddenness of the onset, the normal pulse and temperature and the stiff condition of the abdomen led him to make a diagnosis of purulent peritonitis. On Sunday he operated, the intestines were scarlet in appearance, the cæcum was movable, turned upwards and rested again the abdominal walls. This gave rise to obstruction. The incision was made in the median line and in addition to it a cross incision was also made and the position of the cæcum was restored. The colon then collapsed, the wound was sewed up and dressed. He died the following day. In this case the inflammation was general, obstruction was due to the turning up of the cæcum. The passages from the bowels on Thursday must have been from the colon.

Case II.—Now convalescing, male, æt. 19 years. Was taken with discomfort in the right groin as the first symptoms. An injection was given by the bowels and he was put on small doses of morphia and fractional doses of calomel to control the nausea. On Sunday the physical condition was about the same, belly was stiff, Hippocratic countenance present, pulse 45, temperature 99°. The injection was not effective and was thought to be due to some bowel obstruction. He saw the patient again Thursday at which time he was lying comfortably on his back. His countenance was brighter and his belly had gone down somewhat, pulse 48. There was noticed a difference in tension over

the abdominal walls, being more marked below the umbilicus. He had complained of some pain on the under surface of the penis. A rectal examination showed the presence of something within the pelvis. At this time a diagnosis of purulent peritonitis was made, but he thought it best not to operate at this time, as the pus would probably arise above the pubes and he could then open the belly and let it out without going into the peritoneal cavity. On Friday the same condition was present. Saturday there was evidence of hardness felt above the pubes. The patient's water was then drawn off. He then opened the belly just above the pubes and let out about one pint of pus, the cavity was washed out and the wound was brought together. By this means he did not get into the peritoneal cavity at all. No fecal matter could anywhere be found: a drainage tube was put in and now on the seventh day the temperature and pulse are normal and the tube only goes in 2½ inches, so he is practically well. Obstruction then in the first case was due to volvulus of the cæcum and in the second one it was due to pus. There was no evidence to be found of perforation in the first case.

Dr. J. W. Chambers said that all of the symptoms of acute peritonitis may give rise to those of intestinal obstruction. An intussusception may get well without the gut sloughing. It is hard to account for the trouble in Dr. Tiffany's cases as nothing could be found to explain the cause. Some foreign body must have gotten into the peritoneum, even though no evidence of it could be found.

Dr. N. G. Keirle said that he had a case where the middle fold of the sigmoid flexure had become fixed, supposed to be the result of peritonitis as nothing else could be found to explain it.

Dr. S. T. Earle said that he agreed with Dr. Chambers that some foreign substance must have gotten into the peritoneal cavity to explain the symptoms above referred to.

Dr. L. McLane Tiffany said we must remember that the intestines are very thin and that myriads of organisms infest their track. Whether these organisms penetrate or not is not known. It may be possible that a twist of the bowels may so alter the conditions as to facilitate their activity. In his case no opening of any kind could be found.

Dr. R. M. Hall said that from the history of his case and the symptoms that were found, he thought that he was justified in concluding it one of intussusception. He brought it before the Society in order to get the opinion of the members on the subject, but was sorry to say that he had received but little enlightenment on it.

Dr. W. J. Jones reported a case of

ACUTE MILIARY TUBERCULOSIS IN WHICH THE PRIMARY SEAT OF THE TROUBLE WAS FOUND IN THE UTERUS.

W. J. Joner, M.D.,
Recording Secretary.

Bismuth Poisoning.—A case recently occurred in France, in which it is alleged that the application of pure subnitrate of bismuth to ulcers following a burn, at intervals of two days, caused sore throat with false membrane on the uvula, palate, and tonsils, foul breath, vomiting, and loosening of the teeth.—*British Medical Journal.*

Treatment of Acute Tonsillitis in Children.—1. When an inflammation attacks the tonsil, is is greatly influenced in its course by the presence of any diathesis.

2. The treatment must be so arranged as to meet and counteract this diathesis.

3. In all cases, simple as well as complicated, the general indications are to keep down the temperature and to relieve the local irritation.

4. The first indication can be met by the exhibition of antifebrine in proper doses; the second by the frequent application of bicarbonate of sodium, either in powder or in solution, to the surface of the tonsil.

5. This plan, properly followed, will generally limit the disease from one to three days.—*Dr. Frank Hamilton Potter, in Buffalo Med. and Surgical Journal.*

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BALTIMORE, JUNE 23RD, 1888.

Editorial.

THE CASE OF THE LATE GERMAN EMPEROR.—Whatever doubts may have been entertained in the past concerning the nature of the malady which destroyed the life of Emperor Frederick III they have been removed by the autopsy recently conducted, if not sufficiently confirmed prior to that event. From the beginning of the trouble Sir Morrell Mackenzie has been credited with the opinion that the malady was not of a malignant nature, and Prof. Virchow's opinion was introduced to support this view of the case. The German physicians have held all along to the theory of malignant action and in conformity with this opinion were urgent in insisting upon a radical operation for the removal of the morbid process. Professional opinion has been divided concerning the treatment of the case, one class of authorities insisting upon a removal of the larynx and the other class upon the plan of treatment which was employed, viz., amelioration of symptoms and prolongation of life by tentative methods of treatment. As no facts will ever be accessible which could prove the correctness of the methods employed a discussion will only end in an assertion of individual opinion. A large number will sustain Sir Morrell Mackenzie in his plan of treatment and others, especially the Germans, will condemn the methods employed. There can be no doubt of the fact that the Emperor's life was prolonged by the skilful attention bestowed upon him by his medical attendants. He was tided over a physical disability a sufficient length of time to render illustrious a reign which places his name among the most enlightened and humane rulers of history. Could this have been done by a more radical procedure in the beginning of his trouble? No man can answer such an inquiry, and yet this is practically the answer the critics of Dr. Mackenzie attempt to give. It is a pure assumption to make such a claim and is not in accord with the teaching of science. One may turn in vain to statistics or to authority for a satisfactory answer to such an inquiry. In the presence of such facts as are known it is rational to assume that all was done that could be done for the illustrious patient and that he succumbed to an incurable malady which neither skill, devotion nor the resources of science could stay. As to the diagnosis of the case, the theory of cancer, we are now assured, was long since accepted by Mackenzie and those associated with him, and simply withheld from the public and from the patient on moral and political grounds. The recognition of the malignant action did not raise in the minds of the attendants the necessity for a change in the course of treatment. The gravity of the situation was fully understood from the beginning and the plan of treatment which had for its chief aim the prolongation of life was rigidly adhered to.

CASCARA SAGRADA IN RHEUMATISM.—The profession of medicine has become so skeptical concerning the claims of new remedies whose virtures are extolled in the treatment of rheumatism that it may seem at first sight a labor of love to suggest another agent for this condition. The simplicity of the remedy and its ease of administration must be an apology for directing attention to its

claims. Upon the authority of Dr. H. T. Goodwin, Assistant Surgeon, U. S. M., H. Service (*N. Y. Med. Jour.*, June 9, 1888,) we are told that cascara sagrada is almost a specific in certain forms of rheumatism. It is well-known that this member of the buckthorn family is one of our most reliable laxatives, but why it should possess anti-rheumatic properties no one has explained. Dr. Goodwin attempts no explanation as to the action of the drug, but relying upon the theory that the proof of the pudding is in the eating of it, attempts to show by a series of cases that the drug has a positive and prompt value in rheumatic cases. The drug was administered in doses of from ten to forty drops of the fluid extract three times a-day. The improvement was marked in every case within twenty-four hours.

Abnormalities of the Urachus in Infancy and Childhood.—It is well for the practitioner to have brought to his attention from time to time those rarer forms of disease or deformity which may be mistaken by the heedless for other more common affections. In the Annals of Surgery of 1887, Dr. Freer relates several cases of disease connected with pervious urachus. He himself had seen two cases, one in an adult female, the other in a male infant two or three months old. This infant was brought to the clinic because he passed urine through his navel. Upon examination an outgrowth was found at the umbilicus and inch and quarter in length. It was hollow, and led toward the bladder, and through it urine passed continually, excoriating the surrounding skin. No opportunity for treatment was given. In another case a boy of 10 years had suffered from incontinence of urine and frequent attacks of hæmaturia, and examination of the urine had revealed a quantity of pus. For these troubles he had been treated successfully. He soon, however, returned to the hospital, saying that his urine passed through his navel, an outgrowth having appeared three weeks before at the navel and become ruptured.

Dilatation of the umbilical end of the fistula with a tent caused a flow of urine by the urethra—for the first time in *seven weeks*. Repeated cauterization of the umbilical end of the fistula produced only temporary closure. Closure by a transplanted flap of skin was followed in a few days by fatal peritonitis.

In another case a boy 1 year old began to pass most of his urine through the umbilicus. Circumcision, done for phimosis, resulted in spontaneous closure of the umbilical opening of the urachus.

In another case, a child five months old exhibited an umbilical opening of the urachus which admitted a medium-sized catheter. At the umbilicus was an out-growth like a strawberry. This was ligated and removed and the lips of the wound were united by sutures. Permanent closure resulted. Dr. Freer refers to several cases where this abnormal condition was observed in adults.

From the facts presented in his article I deduce the following conclusions. A pervious condition of the urachus is the result of what is known as the strumous diathesis; it may cause the formation of cysts in the abdomen; closure of the umbilical opening of the previous urachus is dangerous unless there is a free outlet into the bladder for the urine and other fluids in the cavity of the urachus; this abnormality should, if possible, be detected and treated in early childhood; attention should be paid in feebly-developed children to any hindrance to the free discharge of the urine through the urethra, as such hindrance may result in the forcible opening of an imperfectly closed urachus. This abnormality should be taken into consideration in the examination and treatment of ulceration of the umbilicus.

To Allay the Thirst of Diabetics, Dr. Duchenne recommends potas. phosphat., ʒj.; aquæ, ʒv. M. ʒij. to ʒiv. several times daily.—*Med. Record.*

Miscellany.

Large Doses of Creosote in Pulmonary Phthisis.—Dr. Bogdanovitch has published some personal observations on the therapeutic value of creosote in phthisis. The writer, who has been suffering from pulmonary and laryngeal tuberculosis for about two years, had tried the drug on himself in small doses (half a grain four or five times a day) some time ago, but without appreciable benefit. After perusal of the observations of Sommerbrodt and Guttmann, however, he again began to take creosote in gradually increasing large doses, beginning with four grains a day, and reaching, in about two months a daily dose of forty-four grains. There took place, fairly rapidly, an unmistakable and permanent improvement in his symptoms. Fever disappeared in a week; expectoration, cough, and dyspnœa steadily decreased to a considerable degree; laryngeal spasm, which had formerly occurred once or twice every month, ceased altogether. As regards the objective signs, however, there was only some diminution of dulness over a certain area, with complete disappearance of fine crepitant râles. As to tubercle bacilli in the sputum, they remained just as numerous as before the creosote treatment. The latter has lasted in all four months, during which period not less than four ounces and two drachms of pure creosote have been ingested. The drug must be taken in doses of about five grains four times daily, in the form of capsules (filled up *ex tempore*), after meals. With regard to disagreeable after-effects, Dr. Bogdanovitch observed in himself, when, by way of experiment, he took as much as twelve grains at a time, or twenty grains in the course of an hour, only giddiness, cardiac palpitation, small and accelerated pulse, general weakness, pallor, and anxiety; but all these toxic phenomena disappeared spontaneously and completely in about half an hour or an hour. On an empty stomach, however, he experienced epigastric uneasiness and pain even from small doses. Dr. Bogdanovitch resumed of late the use of creosote in order to study the effect of a six months' course. Dr. Herman Sahli's paper on "Guaiacol as a Substitute for Creosote" seems to be unknown to him.—*The British Medical Journal.*

The Treatment of Whooping-Cough.—Dr. R. S. Thomson lately read a paper before the Medico-chirurgical Society of Glasgow on the use of nitric acid, ergot, and chloral in the treatment of whooping-cough. According to an abstract published in the "Glasgow Medical Journal," he had observed benefit only from chloral, and that not in reducing the number of the paroxysms, but in mitigating their severity. In the discussion many remedies were spoken of, and belladonna seems to have acted more favorably than any of the others alluded to, although it is worthy of remark that one of the speakers reported that, while in one epidemic every patient had recovered rapidly under its use, in another it had appeared to be of no benefit at all—wherefore he had come to the conclusion that there was no specific for whooping-cough, an opinion that seems to have been shared by most of the speakers. Some of them even thought that the disease had to run its course, like an essential fever.—*N. Y. Med. Jour.*

Method of Estimating Adduction and Abduction of the Leg in Hip Disease.—Lovett's method consists in calculating mathematically the angle of deflection. The legs of the patient being placed in a straight line with the body, if one leg be fixed in adduction or abduction there will be lateral tilting of the pelvis. Real shortening can be measured from the anterior superior spine to the malleolus; practical shortening from the umbilicus to a malleolus of each ankle. The line between the anterior superior spines will form two angles with the position it would occupy naturally by crossing the latter line diagonally. Either one of these two angles represents the angle of deflection of the leg on the diseased side. To estimate this angle in degrees Dr. Lovett

has constructed a table. It will be seen that if the practical shortening is greater than the real shortening the diseased leg is adducted; if less than the real shortening, it is abducted.—*London Medical Recorder*, May 21, 1888.

Orchitis and Epididymitis. — Dr. Lowndes (*Lancet*) treats the above according to the method of Fourneaux Jordan, which consists ih painting the testicle with a solution of nitrate of silver, two drachms to the ounce; at the same time strict rest is enforced. The pain is soon subdued, and the testicle returns to its normal size in a few days. Sometimes a second painting is neccessary. Dr. Lowndes has treated 269 cases in this manner.—*New England Medical Monthly.*

An Anæsthetic for Minor Operations.—The *Revue de Thérapeutique* of May, 1, 1888, gives the following convenient mixture:

Chloroform,
Spirits of wine,
Cologne water, equal parts.

To be inhaled for transient anæsthesia.

Free Entry of Books for Colleges. —The Treasury Department has issued the following circular to collectors in regard to the free entry of books and other articles for colleges, etc.: "On the importation of articles claimed to be exempt from duty under the provisions of paragraphs 660, 759 and 771, act of March 3, 1883, except in the case of serial publications, you are authorized, in the absence of the oath of the proper officer, to permit the consignee to make free entry on his oath that the several articles enumerated in the entry are especially imported for the use of an institution or society of the character specified in said provisions of law, and the execution of a bond, the penalty of which shall be twice the value of the articles in question, conditioned for the production of tne proper oath within four months from the date of the entry, The requirements of the department's instructions of October 9, 1884, (synopsis 6599), and November 28, 1887, (synopsis 8553), inconsistent with these instructions are hereby revoked."

Insect Stings.—Dr. Bernbeck, in the *Vereinblatt der Pfaelzer Aerzte*, No. 6 advises the following application for insect stings or bites:

1. ℞ Collod. elastic. . . 19 (℥v)
Acid. salicyl. . . 1 (gr. xv.)

M. Sig. To be applied to the sting.

2. ℞ Collod. elastic. . 10 (℥iiiss).
Hydrarg. bichlorid. cor. .01 (gr. $\frac{1}{6}$).

M. Sig. To be applied to the sting.

The above lotions are equally good, so that ammonia need no longer be used in such cases. As soon as the lotion is applied the pain ceases, and only rarely did the surrounding skin become swollen in consequence of the sting,—that is when the remedy was immediately applied.—*Therapeutic Gazette*, March, 1881.

The Antiseptic Treasment of Pharyngeal Diphtheria. — Huchard employs the following method of treatment:

The application to diseased surfaces of an alcoholic solution of bichloride of mercury, 1 to 1000. Irrigation with boric acid solution, 1 to 100. Internally the administration, hourly, of teaspoonful doses of

Sodii benzoat. . . ʒ 2½.
Aquæ menth. piper.,
Aquæ destillat. . āā ʒ 10.

Alcoholics, coffee, and nourishing foods should be given, and the air of the room antisepticized by a spray of the antiseptic substance found least irritating.—*Revue de Thérapeutique*, April 15, 1888.

Tolerance of Bacteria by the Lining Membrane of the Uterus.—Straus and Tolydo, at a recent meeting of the Academy of Sciences of Paris, reported experiments upon animals of various species, which had recently given birth to young by normal parturition. They introduced into the uteri of such animals

large numbers of microbes ordinarily pathogenic to them, but with infection, Only the microbe of chicken cholera proved infective. The experimenters offered no explanation of this interesting phenomenon.—*Gazette Hebdomadaire*, April 20, 1888.

Treatment of Fetid Diarrhæa.—The following methods of treating fetid diarrhœa are recommended in the *Bulletin Médical*, May 9, 1888, and may be recommended now, when such troubles are likely to occur frequently:

℞ Salicylate of bismuth,
Calcined magnesia,
Chalk,
Phosphate of lime, of each 2½ drachms.

Rub to a smooth powder.
Sig.–A half teaspoonful twice a day.

With this give an enema composed of:

Salicylate of bismuth	2½ drachms
Salicylic acid	15 grains
Boiled water	5 fluid ounces

At the same time a strengthning diet may be used.

Another method is to use the following prescription:

℞ Naphthaline (pure),
Sugar, of each a drachm and 15 grains.,
Essence of bergamot one or two drops.

Rub to a smooth powder and divide into twenty parts:

Sig.—Take one every hour.

With this the following may be used as an enema:

℞ Naphthol, 30 grains.
Alcohol, a fluid drachm and a half.
After the naphthol is dissolved, add a pint of distilled or boiled water.

Wine of Ipecac by Inhalation.—Murrell reports in the *Medical Press* of April 25, 1888, six cases of various affections of the lungs which were greatly benefited by inhalations of wine of ipecac, in spray. He concludes that most successful results are obtained from the employment of the ipecacuanha spray in cases of chronic bronchitis and bronchial catarrh. In fibroid phthisis there is often a marked improvement, even when no constitutional treatment is adopted. A single inhalation will sometimes restore the voice in cases of hoarseness due to congestion of the the vocal cords. It is a matter of little importance whether the spray be given with a handball spray apparatus or with a small steam vaporizer. In either case the spray must be warm and the patient should not go out for some minutes after inhaling. Care should be taken to see that the spray really enters the chest and is not stopped by the arching of the tongue against the wall of the mouth. The best results are obtained by using the spray for about ten minutes, three or four times a day. In the majority of cases of winter cough relief will be obtained in ten days.

Creolin Internally.—Spaeth, of Frankfurt, in the *Münchener medicinische Wochenschrift* of April 10, 1888, gives the following formula which he has found useful in prescribing creolin internally:

Creolin.	ʒ 3.
Tragacanth. pulv.	gr. 30.
Spirit. dilut.	♏ 30.
Glycyrrhizæ pulv.	ʒ 6.
Muc. gum. acac.	q. s.

Ft. pil. 200 in num.

Dose.—One pill, two or three times daily.

Retirement of Professor Donders.—Professor Franciscus Cornelis Donders, the well-known ophthalmologist of Utrecht, celebrated his seventieth birthday on May 27, and retired from his chair in the University, according to the Netherland law.—*Journal of American Medical Association.*

Menstruation has been observed to occur in a child one year, in a child of four, and recently Kornfield reports a case of manstruation in a child of three who had been subject to sexual irritation.

Medical Items.

Dr. Rachel Bodley for twelve years Dean of the Woman's Medical College Philadelphia died suddenly in Philadelphia, June 15.

The American Association for the Cure of Inebriates held its semi-annual Session in Brooklyn last week.

A blind bigamist at Atlanta is likely to be pardoned because the chain-gang managers do not know what to do with him. He might be used as a subject for rabbit-eye practice. He is too bad for enlargement.—*Baltimore American.*

The *American Analyst* for May 15, 1888, states that it has caused the "Moxie" Nerve Food to be analyzed, finding it wholly inert. Publication of this fact resulted in a suit for damages by the proprietor of "Moxie" which was decided for the defendant, the plaintiff paying all cost.—*Med. News.*

At the request of the faculty of Dartmouth Medical College, Dr. Paul F. Mundé has consented to give the course of lectures on gynæcology this year, as it has been found impracticable to fill otherwise the vacancy caused by the death of Dr. Dunster. Dr. William H. Parish will give the course in obstetrics.—*N. Y. Med. Jour.*

The Physician's Bedside Record is the title of a very conveniently arranged clinical record devised by Dr. S. C. Segur, of Hartford. It can be made to serve as a memorandum for the nurse's direction, and also for keeping a history of the case from day to day. It is compactly arranged and of small size, so that it may easily be filed away, and take the place of the large case-book.

A San Francisco paper says: "The steamship *Main*, from Bremen, which had been detained at quarantine for two days on account of a case of small-pox being discovered on board, reached Pier 8, Locust Point, Baltimore, yesterday. Her 1,147 emigrants were discharged and sent west by the Baltimore and Ohio Railroad. That is the way they do it in the East. On this coast she would have been kept in quarantine about a month.—*Boston Med. and Surg. Jour.*

Dr. Jerome Cochran, of the State Board of Health of Alabama, in a recent report has stated that the late epidemic of yellow-fever in Florida was not introduced into the State by the usual trade channels, but by smugglers. This confirms unofficial statements received by Supervising Surgeon-General Hamilton, of the Marine Hospital service, several weeks ago. Dr. Cochran says that the last case was discharged May 11, and the last death May 8, and that there have been active precautions taken to prevent the reappearance of the disease.—*Science.*

The health-officer of San Francisco wrote to the health-officer of New York under date of March 20th, as follows: "Yesterday Anton Anderson, aged twenty-one, a native of Norway, was sent to the small-pox hospital. He stated that he came from Glasgow by the steamship *Circassian*. Immediately on landing at New York he left for this place, arriving here on the 17th instant by the Southern Pacific railroad. According to his account he was taken sick on the 11th, the eruption appearing on the 14th. It is a bad case of confluent small-pox."

The Tenth Annual Congress of the American Laryngological Association will be held in Washington, D. C., September 18th, 19th and 20th, 1888. Preliminary Programme.

1. Ten Years of Laryngology. Dr. Rufus P. Lincoln, New York.
2. Congenital Bony Occlusion of the Posterior Nares. Dr. Charles H. Knight, New York.
3. The Effects of varying rates of Stimulation on the Action of the Recurrent Laryngeal Nerve. Dr. Franklin H. Hooper, Boston.
4. Subglottic Laryngeal Enchondroma. Dr. E. Fletcher Ingals, Chicago.
5. A Photographic Study of the Laryngeal Image during the Formation of the Registers, and Production of Variations in the Pitch of the Singing Voice. Dr. Thomas R. French, Brooklyn.
6. Lupus of the Nose, Pharynx and Larynx. Dr. Samuel Johnston, Baltimore.
7. Imaginary Lingual Ulceration. Dr. George M. Lefferts, New York.
8. A possible Substitute for Tracheotomy and Intubation in certain cases. Dr. Edgar Holden, Newark.
9. Antiseptic Nasal Surgery. Dr. Clarence C. Rice, New York.
10. A Case of Sarcoma of the Tonsil. Dr. Alexander W. MacCoy, Philadelphia.
11. A Case of Subglottic Chronic Stenosis of the Larynx cured by Dilatation. Dr. Frank Donaldson, Baltimore.
12. Internal Œsophagotomy. Dr. John O. Roe, Rochester.
13. The Treatment of Atrophic Rhinitis by the Galvanic Current. Dr. J. H. Hartmann, Baltimore.
14. The Anatomy of the Nasal Chambers. Dr. Harrison Allen, Philadelphia.
15. Notes on a Case of Nasal Caries, complicated with Meningitis; successfully treated by means of the Surgical Drill. Dr. Wm. C. Jarvis, New York.
16. On Fixation of one or both Vocal Bands in the Phonatory Position. (So-called Abductor Paralysis.) Dr. F. Donaldson, Jr., Baltimore.
17. Residence at certain High Altitudes as a means of Cure for Laryngeal Phthisis. Dr. Clinton Wagner, New York.
18. Further Investigations as to the Existence of a Cortical Motor Center for the Human Larynx. Dr. D. Bryson Delavan, New York.

Besides the above titles which have been received to date, papers have been promised by Drs. Morris J. Ash, J. Solis-Cohen, John N. Mackenzie and Beverley Robinson; and by Dr. A. Gouguenheim, of Paris. A number have yet to be heard from.

Original Articles.

THE SUCCESSFUL TRANSPLANTING OF A PIECE OF RABBIT'S CORNEA INTO THE HUMAN EYE, FOR THE PURPOSE OF RESTORING SIGHT TO A BLIND MAN.

BY JULIAN J. CHISOLM M.D., OF BALTIMORE.

Professor of Eye and Ear Diseases in the University of Maryland and Surgeon in Chief to the Presbyterian Eye, Ear and Throat Charity Hospital of Baltimore City.

Robert Gross, aged 29, a short healthy man, lost both of his eyes three years since from the effects of caustic lime. In each eye the conjunctiva sloughed from over the entire face of the cornea and parts of the lids, leaving the upper lid adherent to the whole corneal surface in the left eye, and both lids firmly adherent to each other and to the eye-ball in the right eye. One year since I liberated the upper lid in the left eye by facing it with a large flap of fleshy substance dissected up from the cornea. Some weeks afterwards I liberated the right lid, first from the lower one, and then from the surface of the cornea. Finding no mucous membrane to face the lid with I prevented the reunion of lid and cornea by using a long tongue of skin from the outer surface of the whole length of the upper lid. After dissecting up this skin flap I made at its root near the outer canthus a vertical slit through the whole thickness of the lid. I then drew the long tongue of skin through the slit, and twisting the pedicle on itself so as to make its raw surface come in contact with the raw surface of the lid secured it in position by sutures. This novel substitution succeeded well. It now permits this eye to open and expose its cornea.

These operations did not, however, improve the transparency of the cornea. Granulations sprung up upon the raw surface, and soon each cornea was again covered entirely by a fleshy conjunctiva, shutting out all chances for useful vision. There was every reason to believe that all other parts of the eye, except the opaque cornea, were normal. There was good light perception but no definition whatever. The case was deemed incurable after a second attempt had been made on each eye to remove the obscuring surface from the cornea by dissecting off this fleshy layer.

Recently Dr. L. Webster Fox, of Philadelphia, had performed the operation first suggested and executed by Prof. von Hippel of Giessen, Germany, of transplanting a piece of healthy rabbit's cornea into a hole cut out to receive it in the opaque cornea of the human subject. The rabbit is selected because it is an animal readily obtained, is easily manipulated, and has a large eye. The cornea of any animal could be equally used. My patient seemed one peculiarly adapted to this experiment. Dr. Fox explained to me the mode of operation and very kindly offered me the use of the special apparatus of Prof. von Hippel for making the section, without which the operation could not be successfully performed.

The operation is a species of skin grafting. Skin grafting I had often done successfully, both in making eye lids, and in adding to the conjunctival surface to prevent the readhesion of the lid in symblepharon. Attempts had been made at corneal transplantation but with no success, because the transplanted piece, however, carefully adjusted always sloughed away, or would be washed away by the ever escaping aqueous secretion. To make a successful graft the anterior chamber must be kept in tact. Up to the time of von Hippel's operations this was a factor impossible to be obtained. The step of all importance in preparing the place for the graft is to remove a circular piece of corneal tissue down to Descemet's membrane, leaving this delicate layer of the lining membrane of the anterior chamber undisturbed. The eye ball must remain full, with no leakage whatever of aqueous to disturb the growing together of the graft and its bed. Fortunately the anatomy of the eye readily admits of this. The various layers of the cornea are much more intimately united to each other than is the innermost layer to the

membrane of Descemet. So that if these layers all be divided the plug of cornea can be readily separated from the basement membrane or lining membrane of the aqueous chamber. The trephine worked by wrist movement can not effect this. Prof. von Hippel's ingenious trephine permits this essential part of the operation to be perfected.

The instrument itself is a modification of the well-known artificial leech. The circular knife is made to revolve by clock work, placed in the handle of the instrument, and yet not giving much weight to it. The slightest pressure upon a small knob in the head of the handle starts the clock movement and causes a rapid revolution of the circular knife. With this instrument not only is the piece cut out from the human cornea, but a duplicate piece of identical size is cut out of the clear cornea of the rabbit, and the patch must therefore accurately fit into the bed, prepared to receive it. It only needed dexterity in the use of the instrument to make a successful experiment.

Familiar as I am in the daily use of delicate eye instruments, I anticipated no trouble in going through the various steps of the operation. I wisely concluded, however, to begin on the eye of a sheep. From the slaughter house I obtained a couple of fresh heads thinking that operating on these four eyes would give me all the needful experience. It did not require many minutes to show me that I could destroy eyes with the greatest expedition. To hold the delicate trephine so vertically as to cut layer by layer of the cornea and not cut at once, by irregular one sided pressure, through into the anterior chamber, could only be acquired after much practice. Many hours and a great many eyes were made use of before this delicacy of manipulation was acquired. Finally I found myself able to remove the circle of corneal tissue satisfactorily and leave the membrane of Descemet intact. When I had acquired this facility I could also go through this membrane uniformly and take out an entire plug of cornea, which was an important part of the operation in the preparation of the graft.

All being now in readiness, on June the 5th the delicate operation of transplanting a clear piece of rabbit's cornea into the opaque cornea of the blind patient was undertaken at the Presbyterian Eye and Ear Charity Hospital of Baltimore. When the patient was placed upon the operating table and the lid space filled with cocaine, a large rabbit was well secured to a vivisection frame and his eye also filled with the cocaine solution. Just before the section the conjunctival cavity of each eye was filled with the mercurial antiseptic solution in constant use at the Hospital. The trephine knife and other instruments had been put in absolute alcohol so as to guard as far as possible against inflammatory sequelæ. The trephine was applied vertically to the centre of the cornea and a superficial groove $\frac{3}{16}$ of an inch in diameter was made. As the surface was very vascular, blood oozed freely at first, necessitating constant sponging to enable me to re-apply the instrument in the groove so as to cut layer by layer of corneal tissue. Upon inspection it was readily seen that where the cornea had been cut sufficiently deep the edges of the circular piece would shrink away from its opposing wall and cup inwards. In the reapplication of the trephine a little more pressure would then be made in the opposite direction for the purpose of avoiding injury to the membrane of Descemet. Finally the entire circular flap seemed loose, by its general shrinkage from the cut edge of the the cornea. One edge of it was seized with an iris forceps and the circular flap was peeled out of its position, the adhesion between the lower layers of the corneal plug and Descemet's membrane yielding readily to the traction. The clean uninjured membrane of Descemet came beautifully into view and through it the patient saw for the first time in three years.

The receptacle being now ready attention was turned to the rabbit's eye. The graft had to be of the entire thickness of the cornea including the membrane of Descemet. In a few seconds this was completely cut through, the trephine sinking deeply into the

aqueous chamber. When the instrument was removed the graft did not come away in the hollow of the trephine as was expected, but was left free completely separated, in the opening through the cornea, and was taken out by a delicate forceps. Its Descemet surface was readily recognized by its concavity, the flap showing distinctly its concavo-convex surfaces.

The adjustment in the hole of the human cornea was soon made and the accuracy of the fit was very satisfactory.

The rabbit's cornea is thinner than the human. The two membranes of Descemet gave the proper thickness and established the continuity of the anterior surface. By suction as it were, the graft stuck in its new position. As there had been no perforation of the anterior chamber there was no escape of aqueous to disturb or dislodge the graft. The lids were closed by compress and bandage, with the usual antiseptic precautions in general use at the Hospital.

For five days the eyes remained undisturbed. The patient had no discomfort whatever, nor evidences of any inflammatory reaction except an itching on the fifth day. When the compress was removed the cloth was found somewhat matted from mucus discharges during the five days of its presence on the eye. The secretions were removed from the lash border by a soft sponge wetted with the antiseptic solution. When the lids were separated the graft was found, firmly united throughout ¾ of its circumference. At one side there was a little groove of separation visible. As its lower face was uniformily united to the human Descemet's membrane consolidation was perfect. During the process of union the graft had lost its transparency. Through the opaque patch the patient could discern no object, only a flood of light, very much greater than at any time during his three years of blindness.

As the operation was a novel one, and so far successfully completed, I concluded to duplicate the same on the right eye also. In this case as in the previous operation all the layers of the corneal tissue proper were removed leaving the membrane of Descemet undisturbed. At the end of five days I found my second graft equally united to the centre of the right cornea in the hole prepared for it by trephining. This graft so transparent when inserted had also become cloudy during the process of union to the contiguous human cornea. Both eyes somewhat resemble the placing of a pearl in the centre of the pannitic surfaces.

These two successful operations in the same subject establish a very important advance in ophthalmic surgery viz., that with proper precautions a corneal graft from an animal can be successfully transplanted into the human eye, and that the absence of blood-vessels in the graft is not an obstacle to its fusion with contiguous living tissue. To what extent the vascular condition of the cornea of these pannitic eyes aided in the speedy union of the graft is a matter for consideration. The liberal supply of blood-vessels, making a vascular wall in contact with the edges of the corneal graft must have aided materially in nourishing it and finally in establishing the direct growing together of these contiguous surfaces. The serous surface of Descemet on the graft united promptly with the exposed upper surface of Descemet's membrane of the human eye. It was an epithelial layer of a serous surface coming in contact with a raw surface, and prompt union occurred. Union could not have taken place had the graft been inverted, turning its conjunctival layer inwards.

The next point of great interest is as to the extent of clearing of these grafts. Will they regain their transparency, now that the infiltration so needful during the process of primary union of the animal graft to the human cornea is no longer necessary? This process of clearing up has already started in the eye first operated upon. When the bandages were removed only a flood of light was experienced. Three weeks have now elapsed since the first operation. Light is commencing to stray through the thining flap in sufficient amount to

cast shadows on the retina. Already the blind man can detect large objects as they move in several feet front of him. From the progress made in two weeks there is every reason to expect that in a short time he will have vision enough to guide himself, when for three years he has been led about.

Each of these eyes was in every way normal except the thick cornea. From the membrane of Descemet back to the retina all structures are sound. Now a healthy piece of cornea, the full size of the pupil is inserted over the pupilary area. It has become firmly united to the human eye, and is as much a part of it as if the man had been born with it. Already the improvement in the recognition of objects, however dimly, amply repays the patient for the anxieties of the experiment. His daily experienced shows a slowly improving sight and holds out a very strong hope that he is going to regain much that he formerly enjoyed. Further changes as they become visible to patient or surgeon will be carefully noted and reported.

It is sincerely hoped that this successful experiment in conservative surgery may give so much benefit to a class of hopelessly blind people as to place corneal transplanting in the list of available eye operations.

A CASE OF CONSERVATIVE CÆSAREAN SECTION UNDER THE RELATIVE INDICATION, WITH TERMINATION IN RECOVERY.*

BY W. W. JAGGARD, M.D., OF CHICAGO.

I desire to place on record the following case of conservative Cæsarean section performed under the relative indication, with termination in recovery. In passing, I beg to call attention to certain points of practical interest in connection with the measurement of the pelvis, the indication for, and the technique of the operation.

Dr. Patrick Dougherty, of Chicago, a short time since invited me to see in consultation a case of alleged contracted pelvis. We examined the patient in the third week of February last, and elicited the following history.

Case.—Mrs. E. S., 36 years old, born in Hillesheim, in the region of the Eyfel Gebirge, Rhenish Prussia, married in the United States shortly after immigration. She had been a sickly child, unable to walk until her seventh year, on account of *Doppelglieder*, *i. e.*, rachitis. During infancy, she suffered from tuberculosis of the cervical glands, two depressed cicatrices being visible on the left side of the neck at the time of examination. Since her seventh year, she has enjoyed robust health.

Her mother gave birth to four children three of whom were females. All of these labors were normal. Of the patient's two sisters, one has had normal confinements, while the other has been invariably delivered by the aid of instruments.

First pregnancy: patient's first child delivered May 13th, 1882. Shoulder presentation, right scapula anterior position. Difficult delivery by version, decapitation, and extraction. Puerperium normal.

Second pregnancy, delivery June 20th, 1883. Same presentation and position as in first pregnancy. Prolapsus of funis. Delivery by version, extraction, and forceps to the after-coming head. Septicemia, puerperium six weeks.

Third pregnancy, induction of premature labor at the end of the seventh lunar month. Same presentation and position as before. Delivery by version and extraction. Child survived the difficult operation a few hours. Puerperium normal.

Fifth pregnancy, beginning of last menstruation June 1st, 1887. *Status præsens:* The patient, of strong frame and well-developed muscles, is four feet seven inches in height, and one hundred and thirty-five pounds in weight. Pregnant; near term; distance from ensiform cartilage to pubis forty-five centimetres

*Read before the Gynæcological Society of Chicago April 20, 1888.

(17½ inches); from ensiform cartilage to umbilicus, twenty-two centimetres (8¾ inches); circumference around umbilicus, eighty-seven centimetres (34 inches). Shoulder presentation, right scapula anterior position.

Pelvic Measurement.

Distance between anterior-superior spinous processes 27 cm. (10½ in.)

Distance between iliac crests 27 cm. (10½ in.)

External conjugate diameter (Baudelocque) 14 cm. (5½ in.)

Distance from sacro-coccygeal joint to sub-pubic ligament (A. G. E. Breisky) 9 cm. (3½ in.)

Distance between the great trochanters 30 cm. (11.7 in.)

Pelvic circumference (Kiwich) 85 cm. (33¼ in.)

Diagonal conjugate diameter 7.5 cm. (2.9 in.)

True conjugate diameter (estimated) 5.5 cm. (2.14 in.)

Diagnosis.—Simple, flat rachitic pelvis, with so-called absolute contraction of the true conjugate diameter. Apart from the pelvis, the osseous system showed no marked signs of rachitis. There was no abnormal spinal curvature, antero-posterior or lateral, and the long bones were perfectly straight.

Indication for Operation.—Notwithstanding the fact that the pelvis was a typical example of the so called absolutely contracted simple, flat, rachitic class, the history of former deliveries demonstrated plainly that the obstacle to the escape of the child through the natural passages was only relative, and not at all insurmountable. Nor is it necessary, in order to explain the woman's survival of former labors, to invoke extraordinary skill upon the side of the medical attendants—in all twelve in number—nor unusual physical endurance upon the part of the patient, although both conditions were doubtless supplied. Both parents were undersized, with relatively small heads, and the children were of a size less than is common. Moreover, the after-coming head was invariably made to present, and the accommodation of the passenger to the passages was thus greatly facilitated. The case was clearly one in which women could be delivered with safety, in all probability, by version, extractio · and craniotomy. On the other hand, the child was living, and Cæsarean section offered the possibility of saving both mother and child, although, of course, with enormously increased maternal risk. The question of the induction of premature labor, so late in pregnancy, was not considered for obvious reasons. In a word, the relative indication for Cæsarean section was presented.

The most important conditions upon which this indication depends at the present time is the consent of the woman, obtained without direct or indirect coercion. Accordingly, a plain, unvarnished statement of all the facts in the case was made to the patient. She was clearly and distinctly informed that, by the destruction of the child and its removal as in former pregnancies, her life would be almost certainly saved, and that the attempt to save both lives by Cæsarean section would be attended by enormously increased danger to herself. After a week's deliberation, she elected the Cæsarean operation. In reaching this conclusion, she was assisted by the Roman Catholic priest of the parish. This gentlemen remarked that the pregnant woman was the aggressor; that she had made the contract of maternity; the child was passive, and had made no contract. In strict equity, entirely apart from ecclesiastical considerations, the child's claims to life should be considered at least equally with those of the mother.

Operation.—The patient at once entered Mercy Hospital. The urine was examined, and found to be normal. The preparatory treatment consisted in a bath, in tepid water, with the liberal use of soap, that the woman's mode of life before admission rendered necessary.

In the selection of the time for operation, I had determined to choose the latest possible moment before labor actually began. From the usual data—date of last menstruation, size and position of

the uterus, abdominal measurements, length of the child measured by calipers (Ahlfeld), estimate of the size and weight of the child by palpation (Carl Brann)—it was possible in this case to make only a probable diagnosis of the time of gestation. I concluded that the woman was in the last fortnight of pregnancy.

Early Tuesday morning, March 6th, the patient informed me that she would certainly fall in labor within the next twenty-four hours. She based her prediction upon dull pain referable to the lumbar and sacral regions, and beginning painful uterine contractions. She had been enabled to foretell her other confinements by similar sensations, and I was inclined to attach considerable importance in this case to subjective signs. The only objective symptom indicative of impending labor was a slight increase in the force and frequency of the intermittent uterine contractions. So the hour for the operation was fixed upon at once in the afternoon.

All precautions were taken with respect to the most thorough cleanliness and disinfection of the operator, assistants, patient, instruments, and environment.

Dr. W. E. Cassellberry administered the anæsthetic (ether); Dr. E. C. Dudley, Dr. Bayard Holmes, Dr. G. W. Whitfield, Dr. B. L. Riese, Dr. M. Scheuer assisted me in the operation; Dr. Patrick Dougherty and Dr. Charles Caldwell assumed charge of the babe. I take this opportunity to make my grateful acknowledgments to these gentlemen for their efficient services.

The woman was in excellent condition; cheerful; pulse and temperature normal.

The steps in the operation were: After evacuation of the bladder, incision through the linea alba, from the navel to a short distance above the pubes, as low down as was safe, on account of the bladder. The diastasis of the recti muscles was well marked, and the peritoneum was incised without dividing much muscular tissue. No omentum nor intestines presented between the uterus and anterior abdominal wall.

The median line of the uterus coincided with the incision, and the usual manipulation to correct lateral version and axial rotation was unnecessary. Before making the uterine incision, Dr. Holmes placed one hand on either side of the cut, and rendered the abdominal parietes tense enough to prevent the access of fluid to the peritoneal cavity. I incised the anterior uterine wall in the median line at a point a short distance above the os internum with a scalpel, and rapidly enlarged the cut in the direction of the fundus, to the extent of thirteen centimetres (5 inches) with a blunt-pointed bistoury. The thickness of the uterine wall was about one centimetre (one-third of an inch.)

The placenta was implanted over the line of incision, and the first gush of blood was frightful. The after-birth was quickly separated by the hand, the amnion ruptured, the child caught by the feet, turned; and delivered without laceration of the uterine wound. The child uttered a lustry cry upon its liberation from the cavum uteri. I had requested an assistant to insert his index fingers into the upper and lower angles of the uterine incision, and bring them up close to the abdominal cut as an additional precaution against the escape of fluid into the peritoneal cavity. In the hurry of the operation, this request was forgotten. After, or, rather, during the evacuation of the uterus, Dr. Holmes pressed this organ through the abdominal incision, by his hands applied on either side, while Dr. Riese brought the edges of the abdominal cut together behind the uterus, and effectually prevented all intestinal protrusion. The lower uterine segment, after this eventration, was firmly compressed by Dr. Holmes with the thumbs and index fingers of both hands, while the corpus uteri was enveloped in hot sterilized gauze compresses. Squibb's aqueous extract of ergot was exhibited hypodermically after the evacuation of the cavum uteri.

Hemorrhage was trifling after the contraction and retraction of the uterine musculature, following the escape of the fetus and envelopes, and was now fully controlled by digital compression. The

elastic ligature was not used in the operation.

Twenty-one deep uterine sutures were inserted, including all the tissues down to the mucosa. For the introduction of these sutures, I used the long, slender laparotomy needle of Thomas Keith. This needle passes with remarkable ease through the thick uterine wall, making a very small puncture, that is completely filled up with the suture material—in this case silk. After passing a finger through the canal of the cervix from above downwaad, the uterine cavity was irrigated with a five per cent. solution of carbolic acid, a bacillum containing ninety grains of iodoform placed within, and the wound closed. Union of the peritoneum over the line of incision was effected by a continuons silk suture. When the two rows of sutures had been drawn taut, the uterine wound was accurately closed, and perfectly dry. The uterus, in a state of normal retraction, was returned to the cavity of the abdomen.

The toilet of the peritoneum was brief, as no fluid had escaped into the abdominal cavity, and the intestines had not at any time protruded. The abdominal incision was closed with interrupted silk sutures.

The duration of the operation was about one and one-quarter hours. From the extraordinary simple *technique*, it would seem that the operation had been needlessly prolonged. But the uterine sutures were inserted deliberatedly and with care; then, too, time was occupied in securing uterine retraction by the application of hot compresses.

The total amount of blood lost was not great — scarcely more than the average loss in normal labors. The chief element of danger lay in the suddenness of the loss, but no indication arose for the employment of transfusion, the apparatus for which was in readiness.

The shock from the operation was profound, but brief. The patient fully reacted within three hours. Her convalescence was uninterrupted. The pulse at seven, the day of the operation, was rapid, 120 beats to the minute, tense and small. It became gradually less frequent, less tense, until at the expiration of the first week it was normal. The temperature remained nearly normal showing slight variation in the second week. These variati ns were attributed to several severe burns, suffered as the result of the injudicious application of hot bottles immediately after the operation. On the third day, the audible escape of flatus was noted, and about the same time patient began to void urine spontaneously.

Tympanites was notable by its absence throughout the recovery. On the fifth day, the bowels were painlessly evacuated after the exhibition of citrate of magnesia, for which a preference was expressed.

The patient did not vomit at all, not even when she was recovering from anæsthesia.

The lochial discharge was slight, odorless, and ceased at the expiration of two weeks. Lactation was not established. After all former confinements, the milk secretion was abundant.

Examination to-day, April 20th, reveals the uterus nearly normal in size in mobile anteflexion. The parametrium is free from any sign of infiltration, and no trace of the sutures in the anterior wall of the uterus can be felt upon careful bimanual exploration. The vaginal finger easily outlines the anteriar aspect of the uterus. The uterus is situated relatively high up in the pelvic cavity, but can be readily made to descend below the place of the inlet by gentle pressure above the pubes. I suspect the presence of adhesions—they must be very slight, however — between the fundus and the anterior abdominal wall.

The child was a small, but perfectly formed, apparently mature male; weight, 3,000 grammes; length, 48 centimetres. The infant thrived on artificial feeding until the sixteenth day, when, after exposure to cold, it died suddenly in a convulsion. The autopsy disclosed intense pulmonary congestion. Although the child was apparently well nourished, it is not improbable that inanition was a predisposing factor. The death of the child was a matter of regret, apart from other considerations, on account of the

possible unfavorable influence on the mother. However, she bore the loss calmly, feeling happy that she had given birth to a living child, capable of baptism.

The diameters of the fetal head were:

Occipito-frontal 11 cm. (4.29 inches).
Occipito-mental 12 cm. (4.68 inches).
Bi-parietal 8¾ cm. (3.4 inches).

Pelvimetry.—Dr. R. P. Harris, whose eminent services as the statistician of Cæsarean section are universally recognized, writes in a recent communication to the *Medical News*, March, 31st, 1888, "What is wanted now is a better acquaintance with pelvimetry, and the steps of the improved operation, as it is performed in this proposition. Certain it is that the notion of pelvimetry generally entertained is obscure and confused in the extreme. Dr. E. C. Dudley informs me that a few weeks ago he encountered a case in which a wife, desirous of becoming a mother, confessed to the practice of the prevention of conception through a period of ten years, under the advice of two distinguished practitioners, upon the ground of alleged contracted pelvis. Careful measurements revealed the fact that the pelvis was unusually large. The woman has since become pregnant. But it is needless to multiply examples of such irresponsible opinion, when we have fatal ignorance flippantly displayed in the literature of the subject. A very pernicious book by a very excellent man and published only two years ago, contain the following sentence: External pelvimetry, while of undoubted service in large averages, is of no use in individual cases. The most common application of it is to measure the conjugate diameter by means of Baudelocque's calipers or the like instrument. One point of the calipers is placed on the back over the sacrum, the other over the symphysis pubis, and the distance between is noted. We then guess how thick the sacrum and dorsal tissues are, and how thick the symphysis must be, and, deducting these measurements, we can guess how long the conjugate diameter, which might have been done without so much trouble in measuring." Many of the cases of Cæsarean section recorded in American annals are rendered valueless for the purposes of comparative study by the omission of accurate pelvic measurements. Now, it must be admitted that the exact determination of the size and form of the pelvis constitutes one of the most difficult problems in obstetrics. A survey of the enormous mass of literature upon this subject, accumulating since the discovery of the contracted pelvis by Julius Cæsar Arantius three hundred years ago fully confirms this opinion. As an excellent critical historical review of the subject, I beg to recommend to recommend to the Fellows of Society the monograph* of Dr. Felix Skutch. While all methods of pelvimetry fail to yield absolutely accurate measurements, and our notion of the pelvic anomaly in the concrete case must be inexact to a degree corresponding, still the diameters and dimensions just mentioned are amply sufficient to establish the probable diagnosis of the shape and relative size of the pelvis in the individual case of the more usual types of deformity, and to afford data for comparative study, and ground for action.

I append the corresponding normal diameters and dimensions, as given by Carl Braun and Schroeder:

Distance between anterior superior spinous processes 26 cm.

Distance between iliac crests 29 cm.

External conjugate diameter (Baudelocque) 20¼ cm.

Distance from sacro-coccygeal joint to subpubic joint (A. G. E. Breisky) 12.3 cm.

Distance between great trochanters 31½ cm.

Pelvic circumference (Kiwisch) 90 cm.

Diagonal conjugate diameter 13 cm.

True conjugate diameter 11 cm.

II.—*The Relative Indication for Cæsarean Section.*—Of course, as an operator, I was more pleased to perform Cæsarean section than to do craniotomy. But the humor of the medical attendant

*"Die Beckenmessung an der lebenden Frau." Jena, Gustav Fischer, 1887.

sustains no relation to the ethics of the case. I cannot forbear to reiterate here certain convictions that must always come up for consideration in similar cases. These propositions I beg to submit, if the expression be not too harsh, not so much as matters of opinion as matters of fact.

1. The necessary maternal mortality of craniotomy, performed under the conditions demanded in Cæsarean section as respects freedom from exhaustion and infection of the patient, with the best instrument and adequate skill, in cases of the simple, flat rachitic pelvis with a *conjugata versa* of six to eight centimetres, is zero. The simple, flat rachitic pelvis is used as a type in this thesis on account of its relatively frequent occurrence. In the generally contracted, and in the generally contracted and flat pelvis, a *conjugata vera* greater than six centimetres must be postulated unless, as in the case I have just reported, the fetal head is uncommonly small. It has been reserved for Leopold to demonstrate the truth of this proposition. While in 215* cases of craniotomy collected from the records of the Berlin Polyclinic, the Clinic at Halle, and the Leipsic Polyclinic, the entire maternal death-rate was 5.6 per cent. the total maternal mortality in Leopold's Clinic at Dresden during the interval, 1883-1887, after craniotomy, including 71 cases,† was 2.8 per cent. In these two fatal cases, the cause of death was eclampsia, so that the mortality, due to the operation itself, has been reduced to zero.

The operation, performed under its own peculiar conditions, with the best instruments, is not extraordinarily difficult. It does not imply a higher degree of operative skill than is fair to presume every qualified practitioner possesses. I have observed in all about thirty cases of craniotomy, and have never noted especial difficulty in the technique of the operation, nor unfavorable results to the mother, when the procedure was really indicated, and when the necessary conditions were present.

*Wyder, Archiv f. Gyn., Bd. xxxii. 1, p. 60.

†Leopold, "Der Kaiserschnitt," etc.. Stuttgart, 1888.

On the other hand, the mortality of conservative Cæsarean section, even when the necessary conditions have been supplied, is still considerable. Of Leopold's 23 cases of the improved Cæsarean section, 2 or 8.4 per cent. died. The following extract from a letter received from Dr. Robert P. Harris is of interest in connection with American statistics:

"Your case makes 16 Sänger-Cæsarean sections for the United States, with 7 recoveries; and 165 for the whole Cæsarean list, with 63 women saved.

"I have 12 cases on record for the last fifteen months, with 6 women and 9 children saved; yours makes the thirteenth. There were 8 operations in 1887, all Sänger's but one, with 4 women and 5 children saved. I have 3 cases in already for this year: one each for January, February, and March; 1 woman and 3 children saved."

The Cesarean section is, and must always remain, the most difficult, dangerous, and formidable procedure in operative obstetrics. The shock incident to the operation, entirely apart from sepsis and the loss of blood, is an element of danger that can never be completely eliminated. It is, perhaps, needless to remark that the successful performance of this operation does imply such a high degree of operative skill, and such an experience in this particular operation, as it is fair to presume the average practitioner does not possess.

As remarked by Leopold,* "The time has not yet arrived when craniotomy upon the living child can be unconditionally substituted by Cesarean section. In a good many cases perforation may be avoided, and in a still larger proportion it cannot be dispensed with."

And Praeger† draws this important conclusion, "In cases presenting the relative indication, and which in a hospital might be subjected to Cesarean section, the general practitioner, as a rule, ought only to consider craniotomy as the operation involving least risk to the mother."

2. The consent of the patient, obtained without direct or indirect coercion, is

* c. p., 164.

† c. p., 116.

an essential condition to the relative indication.—*ex. gr.* in hospital practice—the woman shall not be permitted to elect as freely as she must be allowed to do at present.

3. The life of the adult female, who has already contracted relations with society, is of incomparably greater value, as judged by human standards, than the problematical existence of an unborn babe. Moreover, the expectancy of life in such children is decidedly less than in children of normal birth. If the operation is performed before the objective changes of labor are evident, as in the case under discussion, there is the risk of the premature interruption of pregnancy, of obviously serious prognostic moment with reference to the child. The necessary early ligature of the cord deprives the infant of an average amount of blood of ninety-two grammes (Budin, Ribemont). The mother is seldom able, even if she were to be permitted, to suckle her child. Finally, the offspring of women, affected with rachitis or osteomalacia, are frequently feeble, sickly, and unable to resist the unfavorable influence of the environment, entirely apart from the effect of hereditary disease. It is not my intention to use the death of the child in this particular case as an illustration of the truth of the statement just made, since in my judgment that event occurred chiefly as the result of most gross carelessness, *i. e.*, exposure of the child before an open window on one of those bitterly cold days in the latter part of March. Of the twenty three children delivered alive by Leopold, one died a few hours after the operation (neglected shoulder presentation, laceration of the liver), eight died principally from cholera infantum within from three weeks to one year of the operation, eleven were living at the expiration of one year. The fate of three is unknown.

Now, while the present status of the Cæsarean operation with us scarcely justi. fies the words of Mauriceaus, aptly quoted by Profesor Lusk:* "If it be true that any woman have escaped, it was the work of a miracle, or the express wish of God, who, if he wills it, is able to raise the dead, as he did Lazarus;" still it does suggest the often quoted remark of Cazeaux, "That which is certain respecting the Cæsarean operation is that more than the half of the women are immediately sacrificed, and that which has been well proven by the experience of the centuries is that, supposing all the infants alive at the moment of their birth, we will see not more than one-half attain the age at which their mothers succumbed."

I do not wish to be regarded as an obstructionist, but desire merely to utter a voice of warning. In this "Cæsarean Revolution in Progress in the United States," let us go slowly. In the words of Professor Cameron, of Montreal that I quote from a letter, and without his permission, "Too much has been claimed for the section, a reaction is bound to set in ere long." Draw the lines of indication and condition more exactly, and surrender the operation to a special class of practitioners.

III. *The Operation.*—The items of special interest in connection with this particular case of Cæsarean section are:

1. In the selection of the time of operation, I acted upon Schroeder's advice, and choose the latest possible moment before labor actually began. The advantage of an aseptic genital canal, daylight, adequate assistance, and the like outweigh the danger of atony after evacuation of the uterus. The researches of J. Braxton Hicks* on "The intermittent contractions of the uterus during the whole of pregnancy" are perfectly familiar to the English-reading profession. In a recent note, this observer writes, "These intermittent contractions, always going on, are ready to be intensified by any exciting cause, and especially so at the periods of the suspended menstruation." . . . "The rapidity with which labor can be induced at almost any time of pregnancy is explained now quite readily. Formerly the fact was not explained; indeed, the

*"The Prognosis of Cæsarean Operation." The Medical News October 8th, 1888, p. 412.

*The Lancet, p. 554, March 17th, 1888.

time for termination of delivery can be precisely stated—the whole process done to order, as Dr. Robert Barnes and myself have pointed out. Dilate the os by elastic bags, turn the fetus by my method, and in two hours generally the fetus is expelled. The whole need not occupy more than from six to eight hours." I was present some years ago at a Cæsarean section performed shortly before term by Professor Spaeth, assisted by Dr. Lumbe and Dr. Ehrendorfer. In this case, as in my own, there was no difficulty in securing retraction after the evacuation of the viscus. Of course, one runs the risk of moment to the child—of interrupting pregnancy some time before term, since only an approximate estimate of the time of gestation can be made from the data we can at present command.

2. The uterus was incised *in situ* and the liquor amnii evacuated through the abdominal cut. Leopold recommends the eventration of the uterus before incision, and it is the common custom to rupture the amnion *per vaginam*. Sänger in his paper, read at the International Medical Congress, recommends the course pursued in this case. I had confidence in the ability of Dr. Holmes' hands to keep blood and liquor amnii out of the peritoneal cavity, and a short cut is of obvious advantage in retaining the intestinal mass within the abdominal cavity, not to mention other benefits.

3. Hemorrhage was controlled by the normal tonus of the uterus and digital compression of the lower uterine segment. I did not apply the elastic ligature around the lower uterine segment before or after the uterine incision on account of the danger of paralysis of the structures at and below the point of compression, a danger to which Sänger,* Doléris, and others have called attention. The amount of blood lost during the incision need not be much greater *without* than *with* the elastic ligature. It need not be much more than the amount of blood in the uterus at the time the incision is begun provided subsequent procedures are executed quickly. The quantity of blood in the uterus at the time the incision is begun is necessarily lost.

4. The long laparotomy needle of Thomas Keith rendered the closure of the uterine wound easy and comparatively rapid. The puncture is very small, and is completely filled out by the sutnre material.

5. The suture material used in this case was silk. The influence of the suture material on the functions of the uterus, menstruation and pregnancy, is a question of grave practical moment. Leopold has rejected silver wire entirely and prefers chrome catgut to silk. In nine consecutive cases he has used this material with entire satisfaction.

The superficial uterine suture was intended to effect linear union of the incised peritoneum, and no attempt was made to fold that membrane into the divided muscularis in order to oppose peritoneal surfaces of relatively great areas. This constitutes a departure from Sänger's method. Schröder* pointed out the essential weakness in the sero-serous suture, when he called attention to the fact that incised wounds with their edges accurately approximated are surer to heal than the opposed peritoneal surfaces. In order that the peritoneal surfaces should unite, some new irritation is necessary to produce adhesive inflammation. This observation has since been confirmed by the investigation of Zweifel, Graser† and J. Veit.‡

*Transactions of Ninth International Medical Congress.

*Zeitschr. d. Geb. und Gyn., Bd. 1, p. 395.
†Habilitationschrift, Erlangen, 1886.
‡Deutsche Med. Wochenschr., 1887, No. 17.

THE YALE MEDICAL SOCIETY, OF NEW HAVEN.—On Tuesday, the 26th inst., at noon, Professor William H. Welch, of the Johns Hopkins University, Baltimore, delivered an address in medicine before the society, in Battell Chapel. In the evening a reception to Dr. Welch was given by Dr. William H. Carmalt.—*New York Medical Journal.*

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING HELD MAY 23RD, 1888.

The President, J. SOLIS-COHEN, M.D., in the chair.

Dr. Jacobi, read a paper on

THERAPEUTICS OF DIPHTHERIA.†

Dr. O'Dwyer, read a paper on

INTUBATION TUBES*

DISCUSSION.

Dr. William Pepper: The evening has been so well occupied in listening to the two important and unusual papers—to me most instructive—that there remains little to say in the way of discussion, save as courteous appreciation of the kindness of our visitors and of our debt to them demands. I rise, then, simply to express our appreciation of the great wisdom of the advice to which we have listened. In regard to the last paper, I wish to add my mite of evidence to the value of the operation introduced by Dr. O'Dwyer. It is destined to fill an important place for these reasons, if for no others; that you can induce parents to assent to intubation, when it is impossible to secure their assent to tracheotomy; that in very young children in whom, as we know, tracheotomy is so difficult an operation, intubation can be performed with great facility, and finally in septic cases, here is an operation for restoration of breathing space by means of an artificial air-tube which does not involve an abrasion of the surface to tempt extension of the infectious process.

From the masterly address of Dr. Jacobi, I am sure that every person present has derived much instruction and much pleasure—stamped, as it has been from beginning to end, with the accents of earnest truth, with the richness of practical experience. It is precisely these details to which Dr. Jacobi has called attention, that are of the highest importance in the issue of our cases. If he had done nothing more than warn us of the danger of relying too implicitly upon trained nurses, he would have done a service. As with every new instrument of precision, after its value has been demonstrated, comes a period in which there is a dangerous tendency to rely upon it too exclusively; so with trained nurses, if we trust too implicity to their unsupervised discretion, we are consigning our patient to more vigorous, and, therefore, more dangerous ministrations—because equally unskilled—than the untrained solicitude of parents and friends. And this must continue to be the case until a longer and more thorough course of study is insisted upon.

So, too, with the high importance of a radical treatment of antecedent and neglected—because apparently trifling—lesions, which the lecturer has emphasized. It is well for us to bear in mind the warning that tonsillar hypertrophies, nasal catarrhs, and the like may tempt the localization of diphtheria, and I may add of scarlatina and of measles in time of epidemic.

The extreme value of iodoform in local treatment I can confirm. Soluble in ether, miscible with glycerine and with oils, capable of use as powder, it is the best of all local applications, and may be applied to all cases and conditions. I would, however, interpose a mild protest against the too sweeping condemnation of the steam atomizer. Used with that gentleness, so wisely insisted upon, and the confidence of the child obtained, the relief to oppression is so soon recognized that we can secure intelligent coöperation in its frequent and regular use. The problem of internal treatment is the most difficult one, a problem which largely and continually occupies our thoughts. I have been glad to hear Dr. Jacobi's clear and outspoken adherence to the mercurial treatment, although he limits it to a certain

†See page 123.
*See page 147.

group of cases. My longer experience has but abundantly confirmed my early impression of its value—preeminently in laryngeal diphtheria whether primary or descending; and I am constantly impressed with the tolerance of children to the bichloride, and equally to the mild chloride. But I would go further than the lecturer. If in a form conspicuous as a dangerous one, which is usually not primary but associated with rhinitis and faucitis, this treatment proves efficacious, why is it not equally where the nasal or faucial disease has not extended into the larynx? I have found cases of nasal diphtheria which were a source of great anxiety yield in a most remarkable way, and it has seemed to prevent the local spread as well as septic infection.

I agree with Dr. Jacobi that it is well to begin treatment with the chloride of iron, and that the association of chlorate of potassium is a matter of comparative indifference, and that large doses should be given at short intervals. But I have not been so fortunate in seeing it usually well borne by the stomach. When gastric or intestinal irritation manifests itself, it is well to stop the iron abruptly and to substitute mercurials. Or, when in the beginning of a case the glandular involvement, the faucial tumefaction, the constiutional symptoms, give evidence of rapid sepsis, we cannot depend upon iron and must give the corrosive or the mild mercurial chloride at once.

In an address covering so wide a field there is much room for difference of individual experience. In threatened heart failure, I would appeal for the early administration of strychnine, which I place above digitalis or sparteine or ammonia, above everything but alcohol. These are but slight observations on a subject opened with a breadth and discussed with a richness for which we cannot sufficiently express our admiration.

Dr. Carl Seiler: I have only to say that in my experience the addition of chlorate of potassium to the chloride of iron has been of great use, although I agree with Dr. Jacobi that chlorate of potash alone is of little use. From laboratory experiments I attribute this to the disengagement of chlorine gas when the two solutions are mixed. In the same way, at the suggestion of Dr. L. Wolff, I find Labbaraque's solution an efficient disinfectant in the proportion of 1 to 5. I use this as a spray to the nasal cavities or fauces, and have had excellent results. I might also say that we should have our carbolic acid solution not only saline but alkaline, and therefore instead of chloride of sodium I add borate and bicarbonate. The soothing effect of an alkaline solution is well known, and I think it frees the surface better from secretions. The solution should be of such a strength that neither exosmosis nor endosmosis shall take place. I see that Dr. O'Dwyer has added an artificial epiglottis to the tube. It has been the experience of all laryngologists to meet with cases of complete or almost complete destruction of the epiglottis by syphilitic or other ulceration, in which there has been no difficulty of deglutition at all. Therefore, I long ago came to the concluson that it is not the epiglottis which protects the larynx, but the apposition of the ventricular bands. And I would suggest, though I have no experience with such a device, that if tubes were so made that the head could slip into the ventricles of Morgagni without interfering with the ventricular bands, there would be no difficulty in deglutiton experienced. It is not only in New York, but also in this city that the only operation for opening up the air passages that parents will consent to, is intubation. I recall a very distressing case in an asylum, in which the matron would not consent to tracheotomy until the mother of the child had been communicated with, and while they were hunting the mother the child chockd to death. This was before we knew of intubation. That we might have performed at once.

Dr. H. R. Warton: The hour being so late I must postpone what I had intended to say concerning some of the complications of intubation. As to the calibre of the tubes the fact that children do breathe well with tubes as now made, is sufficient evidence of the correctness of Dr. O'Dwyer's position. Since my

experience of this, I am not so anxious as formerly to get in the largest tracheotomy tubes.

Dr. E. E. Montgomery: Since August, 1886, I have performed some thirty or forty intubations, having previously done some twenty-eight tracheotomies. Fifty per cent. of the children intubated have recoverd. My experience is that this operation largely reduces the necessity for tracheotomy, and I believe that if intubation were done early in every case, tracheotomy would rarely be necessary. I cannot refrain from saying that I feel that in devising and perfecting his operation, Dr. O'Dwyer has been a benefactor to the medical profession and to the human race.

Dr. M. Price: In the evolution of steam from lime I have for the last fifteen years depended upon the same method as country people use in the scalding of hogs. Put a few pieces of lime in a bucket with hot water, place a blanket over the bed and let steam pass over the child's head. Soon the child acquires confidence and asks for relief, and will even bend his head down over the bucket trying to get the vapor into his throat.

Now, if every half hour a hot stone or brick or piece of metal be added to the water, it will keep up the heat without any stove or fire being needed in the room. It keeps the room clean and the atmosphere sweet, I have not found so much danger of contagion when lime is used.

I show here a specimen of tincture of chloride of iron in syrup, which is well made and of the proper color. There are very few drug stores where you can get it properly made, and if you don't get the right thing it is of no good whatever. Its greatest good is in its local effect.

Dr. Shimwell: I have performed intubation sixteen times with seven recoveries. In all cases there has been immediate relief to respiration. In one case I had to remove the tube twice, and introduce it three times, and perform artificial respiration. In removing the tube post-mortem, I have found it impossible to drag it down through the trachea, so there is no danger of slipping. Is not the occurrence of substernal respiration depression rather too late an indication to wait for?

Dr. Edwin Rosenthal: In the mercurial treatment of diphtheria, I have resorted in two cases recently to the sublimation of mercurous chloride from platinum foil. One died, one recovered. The case of death was almost in extremis when the treatment was instituted.

The President, Dr. J. Solis-Cohen: I have listened with pleasure and with profit to both these paper; and with all the study that I have given to this subject, I have gained information to-night on many points. The advice to give early attention to the heart, that when danger already threatens it may be too late to effect anything with remedies, is advice that we should all take to heart. We have been distinctly taught that the prevention of this complication must be from the beginning an integral part of the treatment.

In regard to local treatment my experience has differed from that of our distinguished guest. Where it can be properly applied to the extreme margins of the pseudomembrane I have found the topical use of chloride of iron, by firm and gentle pressure with brush, or, preferably, cotton wad, the most serviceable agent I have used. The drug has astringent and a disinfectant action, and I am satisfied that I have time and again seen it assist the detachment of false membrane, and apparently prevent the extension of the infection. Concerning the value of chloride of iron internally, the importance of large and frequent doses, the advantage of mixture with glycerine to assist its local effect, I can only confirm what has been said. So, too, as to the bichloride of mercury; I am glad to hear its great usefulness emphasized, and, with Dr. Pepper, I would include all forms of the disease in the field of that usefulness.

Empirical observation has long taught us the pre-eminent value of the chlorine compounds in general in the treatment of diphtheria; and the mercury chlorides, more particularly calomel, however, have always enjoyed a high reputation in the internal treatment of membranous laryngitis. It has pleased me,

in these discussions, to hear reasons, at least plausible, advanced in explanation of facts which our forefathers learned and used empirically; this is the true direction of medical progress. The topical action of steam is very important. It has always seemed to me that in the natural course of the disease the membrane is thrown off by an accumulation of fluid beneath it which softens it and secures its detachment. We aim, then, by furnishing artificial moisture, to imitate the natural process of recovery. And this leads me to speak of the value of the vapors from lime in the process of slacking. Using a large wash-tub or wash-boiler, and keeping up a supply of large pieces of lime, we secure an abundant disengagement of the hot vapor of water, carrying up with it particles of lime, which mechanically assist by prying up the edges of the pseudomembrane, and thus favoring the access of the vapor of water beneath it.

There is another method of local treatment which I employed with great satisfaction, more especially in former years, when I saw more of the disease—that is, inhalation of carbolic acid in the spray of a steam atomizer, in very large doses. Twenty to twenty-five grains would be added to the ounce of water, and from half an ounce to an ounce sprayed into the throat every hour, or every half hour, until commencing discoloration of the urine gave evidence of saturation, when the remedy was to be stopped until the urine again became clear. Under this method I would advise the attending physician to see the child four or five times a day, always having the urine last voided saved for him, and when the olive discoloration was noticed to intermit the carbolic acid. This seemed to me to disinfect the system, and thereby improve the local condition, and, at the same time, to prevent or diminish the danger of systemic sepsis. I was not aware, before to-night, that such small doses of carbolic acid, as Dr. Jacobi mentions, could be of service.

I must repeat our sincere appreciation of the obligation under which Dr. Jacobi has laid us by his masterly paper. I am also glad to thank Dr. O'Dwyer for his lucid exposition founded on fact, and proved by actual exhibition of specimens, that the small calibre of his intubation tube is amply sufficient for due respiration. My experience with tracheotomy has led me to favor large tubes, the largest that can be introduced without touching the walls of the trachea. I still believe that I have seen life saved by taking out small tubes and substituting larger ones. And I confess that the small calibre of the tube used was one of the theoretical considerations which I enumerated among the drawbacks to intubation. But facts are stronger than theories, and as the small calibre intubation tube does seem to give air enough, and as enough is all that is wanted, I am ready to profess my satisfaction with its present calibre.

I must ask Dr. O'Dwyer to make clear to us the question as to the impaction of membrane. This is not a mere theoretical objection, but is borne out by experience. Perhaps I have been led to attach an undue importance to the matter by an accident which occurred to me a year or so before Dr. O'Dwyer read his now historical paper before the International Medical Congress at London in 1881. I had been called to a case of membranous laryngitis, and had proposed tracheotomy, which had been declined. As I turned to leave the room the mother called piteously, "Oh, Doctor, don't leave my child without trying to do something for it." I said to my assistant, "we will try to save this child," and taking a catheter I cut off one the end, and passed the instrument into the larynx. The child instantly became black in the face, and there was nothing for it, but, without asking any questions, to plunge my knife into the trachea as the child lay on its mother's lap. I inserted the same catheter through the orifice deep into the trachea, and then we performed artificial respiration; my assistant inflating the child's lungs through the tube with his own breath, and my hands exercising compressing of the thorax in respiratory rhythm; and, after a while, we had the satisfaction of leaving the rescued child sleeping peacefully with unobstructed respiration. But I confess that this experience cost me

some of the most anxious moments of my life, and has left a fear of the danger of crowding down membrane in front of a tube introduced into the larynx, which may, perhaps, make me overanxious.

Dr. Jacobi: The slaking of lime has the further advantage that it is the only way to utilize lime. A lime-spray is useless, but in slaking a large amount is carried up into the air and air-passages.

The suggestion of the President that carbolic acid should be used in spray until discoloration of the urine is noticed, I do not feel inclined to adopt. Diphtheria is the very disease in which no complications should be allowed to exist, and we must not tempt them. A single case in which we should have to blame ourselves for a possible nephritis would, in my judgment condemn treatment. Besides, young infants are sometimes poisoned by very small quantities.

Dr. O'Dwyer: Pushing down of membrane does occur, though rarely. The difference between the liability to the accident in catheterization and intubation, is that the catheter has an open, comparatively broad end, while the intubation tudes are comparatively probe-pointed. One pushes and catches the membrane, the other slides past it. I have crowded membrane down in only two cases out of two hundred sufficiently to produce asphyxia. In those two, on removal of the tube, the cast was coughed out.

If we take away the tube because the child is breathing badly and the trachea is full of membrane, the child not having the strength to cough it out, the child chokes from the absence of the tube, not from its previous presence. My attention is now being directed to devising a means to get rid of this membrane. I hope to present something practical before long.

Blocking with membrane while the tube is in may occur. Formerly, when the swell of the tube was not so great, it would be coughed out, but now it is not coughed out and suffocation may take place. The original tube was better in this regard.

The earlier tubes were made to fit into the ventricles with the idea of permitting the approximation of ventricular bands, but it did not work. It is true that the epiglottis is merely an accessory, but in an intubation case the the ventricular bands being held open we have to depend upon it; and that is the reason, the dependence being a poor one, that solids and semisolids which can go down in mass are better than liquids.

THE CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD MAY 18, 1888.

The 211th meeting was called to order by the president Dr. William Green, who occupied the Chair in the absence of the President.

Dr. J. G. Jay, read a paper on

CÆSAREAN SECTION WITH OOPHORECTOMY,

with report of a successful case.

Dr. Thos. A. Ashby said that the paper of Dr. Jay had so thoroughly covered the ground that there was scarcely anything else to be said. If the statistics of Dr. Harris, quoted by Dr. Jay were divided into two parts, the latter half would show marked improvement in the results. This improvement is due to the mode of making the uterine sutures and to antisepsis. Also to the fact that now the operation is one of election. It is undertaken promptly. The cause of death to the child in this case was due to the delay in performing the operation. It was subjected to pressure. The amnion was evacuated and in consequence the blood supply was impaired. If the operation could have been done earlier this condition would have been obviated. At the time that Dr. Jay did the operation he was of the opinion that Porro's method was the best to adopt, because of the presence of the fibroids, etc., but the results show that it was not. He spoke of a case on record where the ovaries were left behind, the woman conceived and abdominal pregnancy was the result. Laparotomy became necessary. The removal of the ovaries precludes any further trouble in this direction.

Dr. R. Winslow, said in considering this subject it is well to dwell upon the importance of the relative indications for doing the operation. Dr. Jay's case was one undoubtedly calling for its performance. In such cases where Cæsarean section, craniotomy, embryotomy, etc., come up for our consideration, the question arises, are we justified in exposing the mother when there is a chance to save the child or are we justified in destroying the child to save the mother? He does not think for the purpose of saving the child we should subject the mother to such a risk. It is true we offer both a chance of recovery. He referred, of course, to those cases where the conjugate diameters being 2½ inches the child could be delivered.

Dr. Geo. H. Rohé said that he wanted to endorse what Dr. Winslow had said. The statistics showed that Dr. Harris says so many children are saved. They are not saved for many die in a very short time.

Dr. L. E. Neale said that as he had had some experience in performing this operation he presumed that he ought to say something on the subject as it is one of the most important in obstetrics. He was first consulted in reference to the case operated on by Dr. Jay, but finding that the surroundings were bad, etc., he declined to act. He thinks the remarks of Dr. Winslow are most pertinent to the subject. He thinks the life of the child should be considered. Dr. Harris reports some children now living and holding responsible positions. That some may die is true, but the same is also true from other modes of delivery. Delay in the operation is an element of the greatest danger. Restricting it to cases where the conjugate diameters are under 2½ inches is a good rule, though it is questionable. It is very difficult to measure the pelvis during labor with such accuracy as to bear on the life of the child by a fraction of an inch. We can not measure the head of the child nor tell the degree of compressibility to which it is liable. The life of the child should be considered and if the surroundings admit of doing a Cæsarean section, with the full consent of the mother, he would give preference to it. The pelvis in the case upon which he operated measured 2¾ inches, but the size of the child's head was larger than usual. He does not think that the death of the child in his case was the result of the operation. The flow of blood which takes place after the removal of the ovaries is said by Hegar not to be menstrual blood, but due to the venous congestion caused by ligation of the broad ligaments. Although secondary Cæsarean section gives better results than we suppose, it is safer to remove the ovaries at the time when the operation is first done, thus preventing the possibility of further conception. He believed that had craniotomy been done in his case there would have been a better chance for the mother, but there was a chance to save both and that was the main reason the operation was done.

Dr. R. Winslow said when the pelvis is very small Cæsarean section is thought to be the best, but in cases where the mother's life can most probably be saved it is then a question to be seriously considered. Should the mother, though, express a desire to have a living child, we are then justified in doing a Cæsarean section, otherwise we are not. The operation which offers her the best chance is the one we should perform.

Dr. Wilmer Brinton said it is hardly fair to compare our statistics here with those of Germany, for there the operation is done by few operators all of whom are skilled in the art, while in our country there are many who perform it. In cases where the antero-posterior diameter is 2½ inches craniotomy is the operation that should be performed.

Dr. J. G. Jay said that in discussing the operation of craniotomy *vs* Cæsarean section there was a good deal to be said in favor of the former if we are in doubt, should he be called to such a case though and found all things to be favorable, he would do a Cæsarean section. Craniotomy is not free from danger by any means and often when regarded safe we find ourselves mistaken. In works on obstetrics, suturing of the endometrium is advised not to be done, but he believes in doing so and that it is an important step in the operation.

W. J. Jones, M.D., Rec. Sec'y.

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BALTIMORE, JUNE 30TH, 1888.

Editorial.

THE RABBIT.—If there is one animal more than another that seems to have been created for a purpose, it is the rabbit. Even the important frog and salamander are thrown into the shade by the usefulness of the rabbit. The last exploit of this accommodating animal is to sacrifice his eye for the eye of man. The operation of transplantation of the rabbit's cornea to the human cornea has been performed sufficiently often to show that it offers some chance of improvement to one totally blind.

Von Hippel's case which ended so successfully in 1886 has encourged surgeons in this country to undertake the operation and one of the few cases which seem to give every hope of a successful result may be seen in the wards of the Presbyterian Eye, Ear and Throat Charity Hospital of this city. This man before the operation was totally blind and at this period is able to distinguish persons and even to see the hand indistinctly. The skilful operator must so manipulate the delicate trephine that only the corneal layers are removed from the human eye and the membrane of Descemet is left intact. This is important since any opening in this membrane would allow the aqueous to escape and thus wash away the little graft. The cornea, normally a non-vascular tissue, is often in such cases selected for operation, covered with blood vessels. This assists in the union of the graft and in the successfu cases, as in this case mentioned, the graft itself first becomes vascular and then clears up leaving a small space of clear cornea, a peep-hole through which the patient can at least see objects. The surgeon doing such operations with success naturally deserves a great deal of credit as the whole technique requires unusual skill. The satisfaction of having done the operation successfully and the increase of reputation and fame from notices in the medical papers ought to be sufficient, and the practice of sending reports of such operations to the daily press, as has been done by the operators of this country, cannot be too severely frowned upon. It remains only for some enterprising oculist to erect a hospital in Australia for those with non-transparent corneas and thus exterminate the rabbits there, the expenses of the hospital being met by the reward offered by the Australian government.

THE LATE DR. C. R. AGNEW.—It is always a pleasure to help in any movement which tends to perpetuate the memory of men great in the profession. Those of us who were personally acquanted with Dr. Agnew will be only too happy to hear that the New York Academy of Medicine will give every one an opportunity to obtain a good portrait of such a pioneer in so many good projects.

Miscellany.

SKIN GRAFTING WITH COCK'S COMB.—Senor F. Altramirano mentions in a Mexican journal, *El Observador Médico*, a case in which he made some experiments in skin grafting on an obstinate ulcer left by a large carbuncle. More ordinary means having failed to cause it to heal, he applied three skin grafts taken from the patient himself. Of these only one took, and the man ex-

pressed so much repugnance to the proceedings that another source had to be found for subsequent grafts. A cock was selected, and fragments cut from his gills; these were split, divided into ten pieces, and the raw surfaces applied to a freshened portion of the ulcer. A carbolized dressing was then bandaged on, the whole being constantly moistened. On the third day, on the dressing being removed, all the ten fragments were found originally adherent. A number of new grafts were then applied, cut from the comb, the gills, and the skin of the back of a chicken. None of these was successful. The cock's gills were again resorted to, and four more fragments successfully grafted. A fresh set of grafts were prepared from this source; but all the cellular tissue was cut or scraped away, in some cases little but the epidermis being left, in others the edges being bevelled, so that the epidermis was in direct contact with the new surface of the ulcer. This set of grafts proved very unsuccessful, so that Dr. Altramirano was led to the conclusion that no advantage is gained by applying the epidermic layer immediately in contact with the surface of the ulcer. This set of grafts proved very unsuccessful, so that Dr. Altramirano was led to the conclusion that no advantage is gained by applying the epidermic layer immediately in contact with the surface of the ulcer.—*Lancet*, May 19, 1888.

Prize Studies of Tornadoes.—The *American Meteorological Journal*, desiring to direct the attention of students of tornadoes, in hopes that valuable results may be obtained, offers the following prizes:

For the best original essay on tornadoes or description of a tornado, $200 will be given.

For the second best, $50.

And among those worthy of special mention $50 will be divided.

The essays must be sent to either of the editors, Professor Harrington, Astronomical Observatory, Ann Arbor, Michigan, or A. Lawrence Rotch, Blue Hill Meteorological Observatory, Readville, Mass., U. S. A., before the first day of July, 1889. They must be signed by a *nom de plume*, and be accompanied by a sealed envelope addressed with the same *nom de plume* and enclosing the real name and address of the author. Three independent and capable judges will be selected to award the prizes; and the papers receiving them will the property of the journal offering the prizes. A circular giving fuller details can be obtained by application to Professor Harrington.

The Late Dr. C. R. Agnew.—At the last meeting of the Ophthalmological and Otological Section of the New York Academy of Medicine, the following motion was made and carried:

"That a committe be appointed, of which the chairman of the section, Dr. David Webster, be a member, whose duty it shall be to obtain a good photograph of the late Dr. Cornelius R. Agnew, for the purpose of having engravings suitable for framing made from this. The right of issue and sale of such engravings shall be given to some first-class publisher, if practicable; if not, the committe shall offer them to the profession at cost.

In accordance with the above, a committee has been appointed. Members of the profession who desire such an engraving accompanied by an autograph signature, should send their names and addresses to the Secretary of the Committee, Dr. Charles H. May, 640 Madison Avenue, New York City, at once. When all such names shall have been recorded, those who have requested a copy of the engraving will be notified of the cost of the same, either by the publisher, or by the committe having the matter in charge.

Antipyrin Locally in Gonorrhœa.—Audhoui prescribes:

Aq. rosæ, . . .	
Aq. lauro-ceras. .	āā ℥ 3½.
Antipyrin. . . .	gr. 75.
Zinc. sulphat. . .	gr. 7½.

For urethral injection.—*Revue de Thérapeutique*, May 1888.

Medical Items.

Veterinary dentistry is the latest specialty in New York.

Prof, R. v. Jaksch has been elected Chief Physician to the Anna Children's Hospital at Gratz.

A monument to the memory of Cohnheim was unveiled at Leipzig, with appropriate ceremonies, on the 3rd of June.

The American Rhinological Association will hold its sixth annual meeting at Cincinnati, Ohio, September 12, 13 and 14, 1888.

The cable announces the death of Dr. J. Milner Fothergill, of London, one of the best known of the English physicians.

On October 26th, the International Society of the Red Cross will celebrate the twenty-fifth anniversary of its organization.

It is officially announced that with the session beginning October, 1890, the Jefferson Medical College will establish a three-years graded course.

Drs. J. B. Muller and H. G. Prentiss have been appointed vaccine physicians for the twenty-first and twenty-second wards respectively.

The Canadian Medical Association will hold its twenty-first annual meeting in the city of Ottawa, on 13th and 14th of September, under the Presidency of Dr. J. E. Graham, of Toronto.

An International Congress for Dermatology and Syphilography will be held in August, 1889, at Paris. Its sessions will continue one week, and will be presided over by Ricord and Hardy.

Dr. Elisha H. Perkins, a well-known retired physician and a prominent elder in the First Presbyterian Church, died Sunday, June 24th, at his residence, on St. Paul street, at the age of seventy-seven years.

Glass drains and pipes for the plumbing of houses have been recommended by a Chicago architect, chiefly from the fact that the material is not acted upon by the agents that usually corrode pipes of other material, and is safe from the attacks of rats.—*Journal of Amer. Med. Asso.*

A very good way to give iodine is, says Dr. Squibb, by inhaling fifteen to twenty drops of iodide of ethyl. Iodine is found in the urine within fifteen minutes after fifteen to eighteen inhalations. It is indicated in syphilis, and in various disorders of the circulatory and respiratory apparatus. The bottle containing this iodine should be kept tightly corked in a dark place.—*Med. Rec.*

The University of Bologna, on the occasion of the eight hundredth anniversary of its foundation, conferred its honorary degree upon several representatives of literature, science and art, and included in the list was Dr. S. Weir Mitchell, of Philadelphia, who represented the National Academy of Science on the occasion.

The fifty-sixth annual meeting of the British Medical Association will be held this year at Glasgow, on August 7th and three following days. The President-elect is Professor W. T. Gairdner, M.D., LL.D. The Address in Medicine will be delivered by Dr. Clifford Allbutt, of Leeds; the Address in Surgery by Sir G. H. B. Macleod, M.D.; and the Address in Physiology by Dr. J. G. M'Kendrick. A special address on "Recent Investigations in Surgery" will be given by Dr. W. Macewen.

At the last meeting of the Ophthalmological Society Mr. McHardy drew fresh attention to a useful device in the case of patients wearing an artificial eye. This consisted in allowing the patient to wear spectacles glazed with odd lenses, that in front of the artificial eye having a refractive power greater by three dioptrics than that in front of the natural eye. This produced an optical delusion to an on-looker as to the size and level of the artificial eye.—*London Correspondent of Medical Record.*

Dr. E. M. Reid, of Baltimore, in an address on Medical Jurisprudence before the American Medical Association says: "A school or college must be of good standing to be allowed to issue diplomas, but any ignoramus can hang out a sign and otherwise advertise as a doctor without having suitably prepared himself to perform the duties of one. In Baltimore an ignorant man, who had served a doctor in a menial capacity, and had had no opportunity to gain knoweldge except such as could be acquired in sweeping the office, and emptying spittoons, after his employer's death hung out his shingle, and commenced the practice of medicine on his own account."

At the Clinical Society's last meeting Mr. Symonds read notes of a case in which he had sutured the rent in a case of rupture of the bladder in a female child, aged seven. The abdomen was opened, about twenty Lembert's sutures inserted to close the rent in the bladder, and the peritoneum washed out with weak carbolic lotion and bichloride of mercury solution. The abdominal wound was then closed and a catheter tied into the bladder. The child did well for a time, but died on the eighth day. A collection of pus was found on the left side of the bladder, extending into the left ilio-lumbar region. The peritoneal part of the wound was soundly healed, but the non-peritoneal part of the wound was soundly healed, but the non-peritoneal part was gaping widely, the sutures having torn through. The urine had escaped and set up the suppuration.—*London Correspondent of N. Y. Med. Record.*

Original Articles.

LECTURES ON THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHÉ, M.D.,

Professor of Dermatology and Hygiene in the College of Physicians and Surgeons, Baltimore.

Lecture IX.

TREATMENT OF THE SYPHILIDES.

The treatment of the syphilides comprises both general treatment and local management. In most of the text-books the latter is considered of subsidiary importance, but I regard it as deserving almost as much attention as the treatment of the general condition. No one who has had any experience in the treatment of venereal diseases can fail to appreciate the advantage of promoting the disappearance of an eruption upon the exposed portions of the body as the face and hands, while it is notorious that many of the later manifestations of the syphilitic virus can only be cured by appropriate topical treatment.

I. General Treatment.

Naturally the first point to consider is the general specific treatment. As regards the time when this should be begun, I am decidedly of opinion that it should be systematically instituted so soon as a positive diagnosis is made. I can see no advantage in delaying specific medication until constitutional symptoms make their appearance. Cases may sometimes present themselves in which it is better to begin specific treatment, even if the diagnosis is somewhat in doubt. I hold it of more importance to cure the patient than to make a faultless diagnosis.

In the early stage of syphilis, that is, within six months after the appearance of the initial lesion, the remedy above all others is *mercury*. At this period the iodides are of little value and had better be omitted. During the later manifestations of the secondary stage the "mixed treatment;"—mercury and iodides combined find their most effective application, while in the so-called tertiary stage, the main reliance must be placed upon the iodides.

The methods of administering mercury are various. Probably the most frequent way of giving it is by the mouth. Other methods are inunction, fumigation and hypodermic injection. Each of these methods has strong advocates, but in general practice it is often inconvenient to use any but the first named.

In giving mercury *per os* any of the preparations employed for internal use may be administered. Many practitioners use blue mass, others calomel, others again the iodides, mercury with chalk, bichloride, and recently Lustgarten has advocated the tannate,—"hydrargyrum tannicum oxydulatum." In using those preparations which are liable to prove irritating to the intestinal canal, the mercurial is generally combined with some corrective which may, in some cases, add to its effect. It must not be forgotten that the prolonged use of mercury and the iodides in large doses results in depravation of the blood, and that hematic tonics are indicated in combination with the specific remedies.

The following are some of the most efficient formulæ used in the internal administration of mercury in syphilis:

℞ Massæ hydrarg, grs. xl.
Ferri sulph. exsic., gr. xx.
Ext. opii, grs. v.

M. ft. pil. No. xx. S.—One 2–3 times a day.

℞ Massæ hydrarg., grs. xx.
Hydrarg. chlor. mit., grs. x.
Hydrarg. c. cretæ, grs. xx.
Ext. opii, gr. v.

M. ft. pil. No. xx. S.—One twice a day.

The calomel may be given combined with opium as follows:

℞ Hydrarg. chlor. mit.
G. opii. āā grs. xii.

M. ft. pil. No. xxiv. S.—One 3 times a day.

The effect of this must be carefully watched, as it rapidly produces the constitutional manifestations of the drug.

Bumstead recommends grey powder with quinine as in this formula:

℞ Hydrarg. c. cretæ, grs. xl.
Quininæ sulphatis, grs. xx.
M. ft. pil. No. xx. S.—One 3 times a day.

Plummer's pill (Pil. antimonii Co., U. S. P.) is also an efficient combination.

The bichloride may be administered either in pill or solution. Dupuytren's pills have long been held in high esteem. They are composed as follows:

℞ Hydrarg. bichlor., grs. ii.
Extr. opii, grs. iii.
Extr. guaiaci, grs xii.

M. ft. pil. No. xii. S.—One pill twice a day.

The granules and tablet triturates of this salt made by many of the manufacturing druggists may also be used. The dose to begin with should not be over one-sixteenth of a grain, and it should always be taken with, or immediately after a meal.

The bichloride is, however, more frequently given in solution as its irritant effects upon the gastro-intestinal mucous membrane can be better diminished by diluting it until it no longer irritates. The oldest formula of this kind is Van Swieten's liquor:

℞ Hydrarg. bichlor., gr. i.
Sp. vini rectif., ʒ ii.
Aquæ. q.s. ft., ℥ ii.

M. S.—Teaspoonful in water after meals.

Bumstead gives this formula, which is often more agreeable than the plain solution.

℞ Hydrarg. bichlor.
Ammonii chloridi, āā, grs. iii.
Tr. cinchonæ Co.
Aquæ āā, ʒiii.

M. S.—Teaspoonful to a tablespoonful 3 times a day.

The bichloride may also be combined with iron, as in this prescription:

℞ Hydrarg. bichlor. grs. ii.
Tr. ferri chlor., ℥ss.
Syrupi limonis, ℥ iiss.

M. S.—Teaspoonful in water after meals.

Or this formula may be employed:

℞ Hydrarg. bichlor., gr. i.
Tr. ferri chloridi, ʒiii.
Sp. chloroformi, ℥ ss.
Aquæ q.s. ft., ʒiv.

M. S.—Dessertspoonful three times a day in sweetened water.

Many syphilographers give one of the iodides of mercury from the beginning. The mercurous iodide (green iodide, protiodide) is the salt usually employed as the mercuric or red iodide is much more irritant to the stomach and bowels. It is frequently combined with lactucarium or opium to diminish its irritant qualities. Piffard recommends these prescriptions:

℞ Hydrarg. iodidi viridis, gr. xv.
Ext. lactucarii, ʒi.

M. ft. pil. No. 100. S. 1–2 three times a day.

℞ Hydrarg. iodidi viridis, grs. xv.
Pulv. ipecac co., grs. cxl.

M. ft. chart. No. 100. S.—One to two powders after meals.

Zeissl gives the remedy in this combination:

℞ Hydrarg. iodidi viridis, grs. x.
Ext. lactucarii, grs xv.
Gummi opii, grs. iii.

M. ft. pil. No. xxx. S.—One morning and night after meals.

The tablet triturates of the protiodide may also be ordered. Those containing fractional doses ($\frac{1}{100}$—$\frac{1}{25}$ grains) are especially useful as the dose can be regulated with the greatest nicety.

In the later secondary and early tertiary forms of eruption, especially the pustular and tubercular syphilides, the mixed treatment is particularly applica-

ble. The bichloride and biniodide of mercury are given in combination with one of the alkaline iodides.

A frequent combination is this:

℞ Hydrarg. bichloridi, grs. ii.
Potassii iodidi, ʒ ij.
Aquæ, ℥ iii.

M. S.—Teaspoonful in water after meals.

The mercuric, or red iodide, is often used with the iodide of potassium as in this formula which is very popular in France, where it is prescribed under the name af Gibert's syrup:

℞ Hydrarg. iodidi rubri, gr. i.
Potassii iodidi.
Aquæ, *ādā* ʒ i.
Syrupi simplicis, ℥ v.

M. S.—Tablespoonful 3 times a day.

Or this prescription of Langston Parker may be used:

℞ Hydrarg. iodidi rubri, grs. iii.
Potassii iodidi, ʒ i.
Sp. vini rectif., ʒ i.
Syr. Zingiber, ʒ iii.
Aquæ, ℥iss.

M. S.—20 to 30 drops after meals.

The tannate of mercury, introduced by Lustgarten is given in pill form in doses of one grain, of which from three to five may be given a day. The carbolate of mercury has also been used by some observers, the dose being one-eighth of a grain three times daily.

The disturbances of digestion produced in many individuals by nearly all forms of mercury when given by the mouth has led many physicians to follow the practice of von Sigmund, the great leader of the Vienna school of syphilographers, in the use of the inunction treatment. It may be mentioned, however, that the inunction treatment was not original with the Viennese syphilographer, but was practised by laymen and physicians shortly after the violent epidemic outbreak of syphilis at the end of the fifteenth century. Grünpeck and Weidmann were among the first to recommend the use of mercurial ointments in the treatmant of the disease. However, the opposition of Brant, Shellig, Ulrich von Hutten, Giovio and others brought the inunction treatment into disrepute until it was resuscitated by Louvrier and Rust at the beginning of the present century.

At the present day the inunction cure is the favorite plan of treatment with most experienced syphilographers. The ordinary mercurial ointment of the U. S. Pharmacopœia is usually employed, although some prefer the oleate, and Lang has recently recommended a preparation which he calls "oleum cinereum." This is a sort of fluid mercurial ointment, made by triturating mercury with lard and oil. It contains 20 per cent. of mercury.

The following succinct directions for the application of the inunction treatment, are quoted from Bumstead and Taylor:*

"Before commencing the treatment take a hot bath and cleanse the skin thoroughly with soap.

"The evening before retiring is the most favorable time for the application, when a piece of the ointment about the size of the terminal joint of the forefinger, is to be rubbed, with the palm of the hand, into some portion of the body or extremities for about fifteen minutes.

"At each application a fresh surface should be selected, so as to avoid irritation from excessive friction of any one portion.

"Any of the ointment which remains after the rubbing should be left upon the skin and not washed off; and the patient should wear the same flannel or merino underclothes constantly night and day. The following order may be followed in the applications:

First evening, to the buttocks.

Second evening, to the thighs, but not near the groins or scrotum.

Third evening, to the sides of the chest, but not in the armpits.

Fourth evening, to the internal surface of the arm and forearm.

Fifth evening, to the back or belly.

The former application is best made by

*Venereal Diseases, Fifth Edition, p. 861,

an assistant, whose hand is protected by a glove.

Sixth evening, omit the application.

Seventh day, take a bath in the morning, change underclothes, and in the evening resume the the applications as above.

"Keep the mouth and teeth clean by the use of a brush and an astringent lotion, and the bowels open. If any symptoms of salivation occur, such as increased flow of saliva, tenderness or swelling of the gums, fetor of the breath, etc., the applications should be suspended, and the body cleansed with soap and water."

(*To be continued.*)

DOUBLE FEMORAL HERNIA ON SAME SIDE.—RADICAL CURE.*

BY CHRISTOPHER JOHNSTON, M.D.,
BALTIMORE, MD.,

Miss M. M., aged sixty-four years, had had right femoral hernia ever since she could remember, and prior to April 25th, 1888, it had never occasioned her any inconvenience. She felt a lump in her right groin, which was more or less tumid during the day, but at night it seemed to recede, to grow smaller, but even then she could feel the diminished tumor. In fact the matter disturbed her so little that she never was obliged to invoke the aid of a surgeon or to wear a truss.

On the 25th of April, however, severe symptoms of strangulation manifested themselves, whereupon Dr. Krozer resorted to taxis, which in the morning proved unsuccessful; but in the afternoon another trial ended happily and the patient's bowels were shortly afterwards entirely relieved.

Dr. Krozer recognized the presence of a tumefaction occupying the former seat of the hernia, and attributed it to a thickened sac. He enjoined rest, and directed a truss to be fitted and worn.

On the first of May, the patient set out for the truss-makers, but, on the street experienced a sharp pain under the right groin, and recognizing the fact that her hernia had come down again she allowed herself to be carried to a friend's house from which she returned home in a carriage.

The truss maker, being sent for by the family, appeared with a truss but failed to reduce the protruded hernia. Dr. Krozer, being then called, was also unable to effect reduction; and in the evening we were invited to relieve the condition. The tumor was one and one-half inches long, oval in form, and gave rise to the sensation of being in part composed of omentum. Taxis having proved unavailing we determined to practice herniotomy at once although the general symptoms of strangulation had not set in, because we felt assured that they would soon follow after the considerable manipulation which the sac and its contents had received.

After the usual incision a two lobed tumor appeared, the lobes being adherent through connective tissue. The lower one was recognized as the true sac, out of which the gut was pressed after a little nick had been made in the constricting falx, the sac remaining unopened; and the other lobe being now opened, revealed as its contents a small mass of omentum closely adherent to its inner wall, and was therefore a second hernial sac. The two pedicles of these sacs were rather less than a quarter of an inch apart, although adherent as were the sacs themselves. It was, therefore determined to pass a silk ligature over each neck close to the femoral ring, and remove the effete sacs. This was accordingly done, the wound filled with iodoform, and a loose dressing applied, No bad symptoms of any kind followed. One ligature fell off on the 17th day; the other on the 27th; and today, June 1st, a very small pore alone remains to mark the spot of the operation.

We may suppose that the omental hernia formed first, filled and occluded its sac; and that at some subsequent period a second sac arose to the inner side of its fellow, and accommodated a knuckle of intestine until the second strangulation occurred.

*Read before the Baltimore Academy of Medicine, June 1st, 1888.

Society Reports.

BALTIMORE MEDICAL SOCIETY.

STATED MEETING HELD APRIL 23RD, 1888.

Dr. Gibbons related a case of

CYSTITIS WITH SYMPTOMS OF PAIN ON MICTURITION, SCANTY URINE, PAIN ON PRESSURE, ETC.

The urine was and is alkaline. By the use of benzoate of soda it becomes acid. Whenever by reason of the irritability of the stomach, the remedy is stopped for 24 hours, the urine again becomes alkaline. He related the case to elicit suggestions as to treatment.

Dr. Chambers asked to know if there was any pus in the urine or if it were normal in other respects.

Dr. Gibbons replied that there was no pus, but on standing a mucous sediment.

Dr. Chambers desired to know if there is a cystocele or other cause, as it is unusual for a woman to have cystitis without some such cause as a woman empties her bladder quite well.

Dr. Gibbons found nothing abnormal except great sensitiveness of the bladder and urethra. As soon as the sound enters the urethra, she begins to scream. There is no difficulty in passing the sound—only this great sensitiveness. There is some slight inflammation of the neck of the womb.

Dr. Smith thinks, in many cases the trouble is due to the condition of the secretions of the kidneys. He had several cases, similar, of young men who thought they had stricture. Put on balsam copaiba, tonics, etc., they got on very well while resting but only then.

Dr. Chambers had seen good effect from nitric acid in such cases. It is just as effectual but slower in action than benzoate of soda. It does not upset the stomach and is followed by good results. He gives it in m x to m xv doses.

Dr. Smith related the case of a gentleman, who has been complaining for over a year with simple flatulence—no other trouble whatever—no eructations, bowels regular, etc. The patient complained of the trouble because it kept him awake at night, often for more than half an hour at a time and it is inconvenient to him at other times. He located the trouble where fats are digested in the small intestines, and put the patient on salicine, cutting off fats from his diet. He afterward put the patient on nitro-muriatic acid, but that doing no good, recourse was again had to salicine. *The peculiarity of the case is that the gas has no odor* but is only annoying.

Dr. Ingle asked if he has used papoid.

Dr. Smith had not.

Dr. Chambers desired to know if there were any fat in the stools.

Dr. Smith replied that there was none.

Dr. Chambers desired to know of Dr. Smith how he accounted for the lack of odor.

Dr. Smith said he could not account for it unless the sulphuretted hydrogen is aborbed.

Dr. Chambers thought there were many interesting points in the case, especially the odorlessness of the gas; that perhaps the patient's olfactories were to blame, in a case contrary to the usual facts in gases arising from decomposition.

Dr. Smith said his patient is a man thoroughly reliable. His wife does not smell any odor when the gas is evolved in bed. His patient has been affected for 18 months.

Dr. Ingle said several of his cases of flatulence with malodorous gas, did well under papoid and boracic acid.

Dr. Chambers presented a specimen of a

SYPHILITIC SKULL, OF A COOLIE

who had been in Bay View for the last ten months, under anti-syphilitic treatment, without any good results. He said there was nothing interesting in it other than that it is an ideal syphilitic skull.

Dr. Chambers also exhibited a specimen of bone, secured in amputation at the thigh, for disease of the knee-joint. There is decided anchylosis. The specimen displays well all the varying forms of osteitis, condensing, rarifying, etc.

He brought it simply to show these typical forms of osteitis, well displayed. The patient, 16 years old, had been suffering from knee-joint disease for 5 years.

Dr. Chambers said he considered struma to stand in the relation to tubercle of the nidus to the germ, as the ground prepared for the reception of the seed.

Dr. Earle said he enjoyed Dr. Chambers' analogy between struma and tubercle and he would go a step further and say that in a strumous gland you will find tubercle.

Dr. Chambers said that a lesion, which the old writers would call strumous, is tuberculous. If struma means anything it means a mere condition. Dr. Chambers says he treats a tubercle as he would a case of sarcoma—the only remedy is removal and the sooner surgeons take this view of it the better for both patient and surgery. The glands and the cellular tissue around ought to be removed as thoroughly and as soon as we would in operating for sarcoma. The treatment by syr. ferri iodide, etc., will not effect a cure.

Dr. Earle said he wanted to emphasize his agreement with Dr. Chambers in this position.

STATED MEETING HELD MAY 14, 1888.

Dr. Scharf related the case of a young woman, aged 26, who came under his care three months ago. He found her suffering from a tumor in the left side of the pelvis, but being at the time unable to make vaginal examination, let her alone for a while. Later, under an anæsthetic vaginal examination was made; the tumor found, filling the left side of the pelvis and extending nearly to the umbilicus. Dr. Jones who was with him thought it a sarcoma. Dr. Saltzer thought it probably lymph thrown out in a peritonitis. The case went on for several weeks when Dr. Chambers was called in and another examination made, the tumor aspirated and a fluid resembling blood, but not blood taken out. It was submitted to Dr. Hoffman who said it was blood undergoing decomposition. The suppurating point was on the upper surface. The possible diagnosis of a hæmatoma had been made by the narrator.

Dr. Chambers wanted to know if the rapid growth of the tumor were due to hemorrhage or to a cellulitis.

Dr. Scharf replied that the day after Dr. Chambers saw it, the abdomen was much larger. The fluid now contains pus.

Dr. Chambers said he was glad Dr. Scharf spoke of the suppuration as he was the guilty party—that in aspirating he had not first washed the abdomen as he cught to have done,and suppuration resulted. This is not the first time he has been guilty of causing suppuration—that he once so entered the thorax with similar results. He makes this confession as a warning to others, and that he may emphasize the importance of the greatest care in antisepticising everything, walls of abdomen, hands of operator, needle, etc., before operating.

Dr. Scharf did not think the suppuration due to Dr. Chambers' aspiration as it was several weeks after it when suppuration began.

Dr. Pennington asked if we should always take the same precautions in aspirating the bladder and in using the hypodermic syringe. He had never had any bad results without such precautions but he thinks it a grave question, deserving careful consideration.

Dr. Chambers thought Dr. Pennington had made a very interesting point. The condition of the tissues has a great deal to do with whether suppuration will follow or not. All of us have at times, in a small per cent. of cases, had pustules follow the use of the hypodermic syringe. The less the resistance of the tissue the greater the danger. He never had an abscess form after giving a hypodermic to a man with colic but has in performing an operation. In broken-down subjects he always takes antiseptic precautions and perhaps ought to in all cases. He desired to be understood to mean that there must be a condition of receptivity, a medium and a germ, to produce suppuration. He thinks the

ordinary nodule without pus formation is due to irritation and exudation.

Dr. Gibbons desired to know of Dr. Chambers how the germ gets into the boil, etc.

Dr. Chambers replied, through an abrasion somewhere, when it is carried through the lymph current till it finds a suitable nidus, etc.

Dr. Waters thought Dr. Gibbons' question important because if it be a settled conviction that abscesses result only from the instruments, it is important to physicians, as it may lead to suits for damages for malpractice, if it result from germs from without. He is sure there are many abscesses, as in the hip and strumous abscesses of the neck, in which there is no abrasion and the germs do not originate in that way. In cases of empyema—(in his own case, for he had suffered with it)—nearly a gallon of pus was withdrawn. It resulted from an ordinary attack of pleurisy. There was no introduction of pus from without.

Dr. Reid thinks the the germ theory of disease is the most rational, but desires to know if it be true in all cases. He cited a case of his in which a man had bruised the tissue underneath without rupture of the tissue on the surface. Suppuration followed in a few days. In this case there was no degeneration or solution of continuity in the tissues for the germ to enter. He thinks it a case which precludes the entrance of the germ from without, there, at least.

Dr. Pennington thinks that as the matter is still in doubt and unsettled, all possible antiseptic precautions ought to be taken for the sake of the patient and for the protection of the physician.

Dr. Scharf thinks that in forming abscesses other factors than non-resistance of tissue, are necessary; that in broken-down subjects the use of the hypodermic needle does not always produce abscess. Other conditions are necessary.

Dr. Chambers does not think it fair to leave the subject as it stands. If brought to the test of experts before a jury we would suffer as breakers of the law unless we used all protective means as far as scientific knowledge, to date, enlightens us. We know there are organisms in these hidden abscesses if we do not know how they get there; that we are responsible for abscesses and suppurations following a wound made in operating; that a germ does not necessarily cause abscess at the point of its entrance but may be carried on in the lymph current until it finds a suitable nidus. As for Dr. Water's case, unfortunately our throats and tonsils are rarely intact and the organisms may readily find an entrance into the lymph-current and be carried on. It can be demonstrated one of the pus organisms is found in all pus formations.

Dr. Reid thinks that if Dr. Chambers is right in his views we should, logically, give germicides internally when we have reason to suspect that there is any bruised tissue, which is likely to suppurate—that we ought to anticipate suppuration, using every precaution to prevent trouble, After preforming craniotomy and inhaling the gases from decomposed brain, etc., he went home and took mercury. He had used mercury in malarial trouble long before he knew of the germ theory, anticipating with it the use of quinia with good results.

Dr. Earle said bi-chloride is changed on coming in contact with albumen, forming the albuminate of mercury, which protects the germ when it is embedded in the tissue—that enough to reach all the germs would kill the patient. That it does have a good effect in malarial trouble, is known but how it acts is not known as it has been shown by Dr. Councilman that the germs are not diminished in the blood by it.

Dr. J. W. Chambers discoursed upon

EMPPEMA FROM A SURGICAL STANDPOINT,

reporting four cases treated by him, with the results obtained. He had diagnosed empyema in each case and had operated, opening the pleural cavity, evacuating the pus and washing out the cavity with antiseptic solutions.

Dr. Reid desired to know if the pus ever undergoes fatty degeneration before absorption.

Dr. Chambers thinks it does.

Dr. Reid thinks Holmes says in some cases it does. He thinks it well to place the patient on the side affected, let the pus gravitate to the lowest point and then let it out by the lancet. He had treated successfully a child in that way. He does not think a small amount of pus remaining always produces trouble. He is not prepared to say that it is always necessary to wash out the cavity.

Dr. Chambers expressed satisfaction in listening to Dr. Reid's case as it bore out his treatment.

Dr. Waters said he desired to express his satisfaction in listening to Dr. Chambers' excellent remarks. He thinks Dr. Chambers has good cause to congratulate himself on his management of his cases. He endorses the valuable suggestion of Dr. Chambers to wash out the cavity, in order to prevent in these large suppurating surfaces, the absorption of pus with resulting pyæmia besides, it serves the further purpose of stimulating healthy granulation.

HENRY B. GWYNN, M.D.,
Rec. and Report. Secretary.

Correspondence.

PUBLISH YOUR MEDICAL OBSERVATIONS.

BALTIMORE, June 23rd, 1888.

Editor Maryland Medical Journal:

SIR:—Your editorial article in the JOURNAL of June 9th, under the head of "Publish your Medical Observations" impresses me as being eminently wise and practical. I think there can be no doubt that much valuable information that we may vainly seek for in Text Books particularly on therapeutics is lost to the profession because those who possess such knowledge often "hide their light under a bushel" not from selfish motives but at times because they do not themselves fully appreciate the importance to others what seems so simple and matter of fact to themselves on the one hand, and from a modesty that makes them shrink from a *seeming* desire to "rush into print," on the other. There are many isolated facts the result of careful observation that taken by themselves would be worth but little, but grouped with other facts and conditions would be of great value. Within a few days past in looking over the XIII volume of the Practitioner for the latter half of 1874, for another purpose I read an editorial article by Dr. T. Lauder Brunton on assuming the editorial management of the Practitioner after the death of Dr. Anstie, in which he makes substantially the same suggestions as in your article, that I think will meet a larger class of observers without in the least impairing the force of your suggestion, if the observations are of sufficient importance to justify a separate or entire article. This I think if honestly accepted and faithfully carried out would carry with it a two-fold blessing, it would rid medical journals of much that is worthless and give in its stead much that is valuable which under existing conditions never sees the light of day. I append what Dr. Brunton says: "We are fully persuaded that almost every busy practitioner in the course of his experience makes many observations and acquires much knowledge which would be most valuable to others. Much of this is lost because extensive practice leaves little time, and the fatigues of the day leaves little inclination to write elaborate papers. Thus it happens that the very men who possess soundest knowledge of their art, have had the widest experience, and are the most successful in practice, communicate less information to their fellows, than those who are comparative tyros in their profession. This ought not so to be, and we therefore earnestly desire busy practitioners, who have no time to write complete articles—to send us, whenever they can, any notes however brief of the modes of treatment which they find most successful in any disease, the class of cases in which they employ one mode rather than another, and the symptoms which induce them to administer any particular remedy.

These notes we shall lay aside until we have accumulated a number of

them; we shall then classify them and shall publish from time to time a digest of the treatment of some disease. This shall be accompanied by an article on the pathology of the disease and sometimes also by a brief account of the physiological action of the remedies employed.

In this way we hope to throw new light on the relations between pathology and treatment, and to learn by comparing their effects at the bedside some of those fine differences between the action of newly allied remedies, which are apt to escape notice in literary experiments." I here hastily pen these few lines upon the spur of the moment principally to endow your most excellent suggestion and here only quote the suggestions of another as an addition to your own. I do not write this necessarily for publication though you are at liberty to make whatever use of it you may see fit.

Very respectfully,

M. Winsey, M. D.,

1220 E. Fayette St.

CROUP AND DIPHTHERIA.

Rockville, Md., June 18th, 1888.

Editor Maryland Medical Journal.

Dear Sir:—Dr. Jacobi's article on the therapeutics of diphtheria, in your issue of June 16th, reminds me of an experience I had in the fall of 1882. I was sent for to attend a family of seven children, all ill with diphtheria, the three youngest having the disease in the laryngeal form. I think that the younger the child, the more apt the larynx is to be affected and that accounts, in part, for the idea that true croup and diphtheria are not one and the same thing. The first one of these children attacked, had chronic tonsillitis and contracted the disease by kissing the dead child of a physician who said his child died of quinsy and that there was no danger of contagion.

Yours truly,

Edward Anderson, M.D.

Reviews, Books and Pamphlets.

Practical Treatise on Diseases of the Skin. Second Edition, thoroughly Revised and Enlarged. By James Nevins Hyde, A.M., M.D., Professor of Skin and Venereal Diseases, Rush Medical College. Philadelphia: Lea Brothers & Co. 1888. 8vo. Pp. 676. Price in sheep $5.50; in cloth $4.50.

The second edition of this work contains more than one hundred additional pages and many changes have been made which were necessary from the rapid strides which the study of dermatology has made in this country of late. The value of the book has been much increased by the new classification and nomenclature of diseases of the skin as adopted by the American Dermatological Association.

A Guide to the Practical Examination of Urine for the Use of Physicians and Students. By James Tyson, M.D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, etc. Sixth Edition. Revised and Corrected, with a colored plate and wood engravings. Philadelphia: P. Blakiston, Son & Co. 1888. For sale by Cushings and Bailey, Baltimore. Price $1.50.

The sixth edition of this well-known work needs scarcely a mention. The latest tests have been introduced and unlike most books, much padding has been omitted, thus rendering the book very useful for reference. The most important addition is the sugar test with phenylhydrazin.

The Essentials of Medical Chemistry and Urinalysis. By Sam E. Woody, A.M., M.D., Professor of Chemistry and Public Hygiene, and Clinical Lecturer on Diseases of Children in the Kentucky School of Medicine. Second Edition. Revised and Enlarged, with eighty-five illustrations, 8 vo. Cloth, 140 pages. Price $1.25. Jno. P. Morton & Co., publishers, Louisville, Ky. 1888.

In the days when massive and unwieldy text-books and prosy didactic lectures are giving way to small manuals and bright clinical lectures, such a book as this deserves credit. In chemistry, however, demonstration and laboratory work cannot be supplanted by books, but such a manual as this forms an excellent aid as a review book. The part devoted to urinary analysis is rather too concise and in some places not clear and modern.

The Relation of Alimentation and Disease. By J. H. Salisbury, A.M., M.D., LL.D. New York: J. H. Vail & Co. 1888. Pp. 332.

Never before in the history of medicine has so much rubbish and nonsense been collected between the two covers of a book and sent masquerading through the world as a scientific work as the above so-called treatise. The bombastic preface is followed by meaningless chapters vainly padded with words but empty of ideas. A pseudo-scientist generally succeeds in imposing on his patients particularly if he claims to recognize sixty-eight or more pathological conditions by a microscopical examination of the blood; but the physicians and others with whom he presumes to rank himself know how to value him. This book is no honor to the publishers.

Intubation of the Larynx. By F. E. Waxham, M.D., Professor of Otology, Rhinology and Laryngology, College Physicians and Surgeons, Chicago. Pages 110. Published by Charles Truax, 75 and 77 Wabash Avenue, Chicago; 1888. Price $1.25.

Dr. Waxham's little book appears just when wanted and will doubtless be read with avidity by many physicians who have become interested in the subject of intubation and have had no opportunity to learn more of it than is contained in journal articles. The author is perhaps the ablest of the many champions who have entered the arena to battle for the method of Dr. O'Dwyer and his work shows an amount of enthusiasm and ability which does him credit. There is no doubt a large field for this new operation, but it is equally obvious that its advocates have been rather extravagant in its praises. The mere facts that O'Dwyer has performed it one hundred times within a year and Dr. Waxham one hundred and fifty times within the space of three years show either that the prevalence of diphtheria with laryngeal stenosis was unusually great or that those gentlemen performed this operation in cases in which tracheotomy would not have been called for. Dr. Waxham's book will be found extremely valuable to those (and every surgeon should be counted among their number) who conclude to follow his advice and familiarise themselve with every detail of the operation.

Annual of the Universal Medical Sciences. A Yearly Report of the Progress of the General Sanitary Sciences throughout the World. Edited by Charles E. Sajous, M.D., Lecturer on Laryngology and Rhinology in Jefferson Medical College, Philadelphia, etc., and Seventy Associate Editors, assisted by over Two Hundred Corresponding Editors, Collaborators, and Correspondents. Illustrated with Chromo-lithographs, Engravings, and Maps. Philadelphia and London: F. A. Davis. 1888. Vol. I, pp. xv–541. Vol. II, pp. 550. Vol. III, pp. 563. Vol. IV, pp. 548. Vol. V, pp. 566.

The five large volumes which make up the "Annual" for 1888 probably give a very scanty idea of the amount of work expended on them. Editors and collaborators from different parts of the world have carefully culled the written history of the recent progress of medical science and have presented it here in a carefully prepared and exhaustive report. The references show that a large number of authorities have been consulted; and those who themselves keep pace with the times in the medical literature of the world will appreciate the fact that this Annual comprises the very latest attainments of medical science. It would be impossible in a short notice to go into a discussion of the many sub-

jects taken up. Suffice it to say that while certain parts, such as gynæcology, surgery and ophthalmology receive a large space, no subject has been neglected. Great praise is due to the editor, co-editors, collaborators and publishers for the excellent manner in which the work has been done, and it is to be hoped that each year will see another edition of this important work. The index, that most important part of every large work, is most complete.

The Applied Anatomy of the Nervous System. By AMBROSE L. RANNEY, M.D., Professor of Anatomy and Physiology of the Nervous System in the New York Post-Graduate Medical School and Hospital; etc. Second Edition. Rewritten, Enlarged and Profusely Illustrated. New York: D. Appleton & Co. 1888. Pp. 791.

The second edition is much changed and the author has furnished a reliable guide to the student of neurological anatomy and physiology. No pains have been spared to make the illustrations as numerous as necessary in a subject of this kind.

The Physician's Leisure Library, No. 7. The Modern Treatment of Pleurisy and Pneumonia, by G. M. GARLAND, M.D., Instructor in Clinical Medicine, Harvard Medical School, etc. Detroit, Michigan: George S. Davis, 1888. Price 25 cents.

This manual fully comes up to the title in being modern in its teaching. In the treatment of pleurisy, it is a comfort to see small blisters used instead of the large pain-producing ones. The author advocates tapping in some cases where a judicious use of blisters might act equally as curatively. In discussing the treatment of pneumonia, the author reviews the many different methods of reducing temperature by means of drugs, baths, etc. The manual is very instructive.

The Physician's Leisure Library, No. 8 *and* 9. The Infectious Diseases by KARL LIEBERMEISTER, Translated by E. P. Hurd, M.D. 2 volumes. Detroit, Michigan: Geo. S. Davis. 1888. Pp. 263. 25 cents each volume.

This is a carefully prepared manual—well translated—of the infectious diseases including some additions relating particularly to the country of the translator. Considering the title and the recent rapid advances made in bacteriology, it will be seen to include a large number of diseases not formerly in this catagory.

Accidents and Energencies. A Manual of the Treatment of Surgical and other Injuries in the Absence of a Physician. By CHAS. W. DULLES, M.D., Surgeon to the Out-door Department of the Hospital of the University of Pennsylvania, etc. Third Edition. Revised and Enlarged, with New Illustrations. 8vo., pp. viii–123. Philadelphia: P. Blakiston, Son & Co. 1888. For sale by Cushings & Bailey, Baltimore. Price 75 cents.

The issue of a third edition is evidence that this a hand-book of practical utility, in size as portable as its suggestions are practicable. By following its simple rules, the unskilled may fill the interval between accident and the arrival of skilled aid,—not only with help to the latter but with great credit to themselves—in being a timely tool in "bridging a crisis" which is so often left unbridged by untimely loquacity as to what to do first use in emergencies.

The Language of Medicine. A Manual giving the origin, etymology, pronunciation, and meaning of the Technical Terms found in Medical Literature, by F. R. CAMPBELL, A.M., M.D., Professor of Materia Medica and Therapeutics, Medical Department of Niagara University. New York: D. Appleton & Co. 1888. Pp. 318. Price $3.00.

Anyone who has had experience in teaching students of medicine, many of whom with little or no preliminary education, has often felt the want of just such a book as this. It would be interesting but sad to take the percentage of American medical students who have even a slight knowledge of Greek or Latin. The mispronunciation of words falls so often on the teacher's ear that a

finally takes up the incorrect pronunciation to make himself intelligible. Such words as *abdomen*, *umbilicus*, *anticus*, *posticus*, *cerebrum*, *etc.*, are undoubtedly more often mispronounced than correctly pronounced even by well-educated teachers. Incorrect prescription writing would be a matter almost impossible to one who would master parts of this most excellent book. The author is evidently most honest in his work and has given to the medical world one of the most classical and strongest foundation works issued in many years. The unfortunate part is that it will probably be read by few men and appreciated by a still smaller number. The perusal of such a work is a source of great pleasure to the educated man.

Theine in the Treatment of Neuralgia. Being a physiological contribution to the therapeutics of pain. By THOMAS J. MAYS, M.D., Professor of Diseases of the Chest in the Philadelphia Polyclinic, etc. Sm. 8vo, p. vii–84. Philadelphia: P. Blakiston, Son & Co. 1888. Price 50 cents.

This little book is made up of a series of articles which appeared in the *Polyclinic* during 1887–88. The author's results seem to be unique. The typography of the book is excellent.

Zur Uranoplastik, Staphylorrhaphie und Prothese. von DR. MED. LUDWIG BRANDT, in Berlin, Mit 2 Tafeln, Berlin. 1888. Verlag von August Hirschwald.

In this monograph the author discusses the three methods mentioned and gives his experience and opinion as to when an operation should be performed and when the obturator should be used.

Zimmer-Gymnastik. Anleitung zur Ausübung activer, passiver und Widerstands-Bewegungen ohne Geräthe nebst Anweisung zur Verhüting von Rückgrats-Verkrümmungen. von DR. B. FROMM, Geh. San.-Rath, pract. Arzt in Berlin und Badearzt in Nordeney 2te Auflage, mit 172 in den Text gedruckten Figuren, Berlin. 1888. Verlag von August Hirschwald.

This is a very simple method of home gymnastics intended to be practised in developing the different parts of the body in preventing or treating certain deformities. The subject covers exercise alone, exercise with resistance and also touches upon massage and rubbing.

A Manual for Hospital Nurses and Others Engaged in Attending on the Sick. By EDWARD J. DOMVILLE, L. R. C. P. Lond., M. R. C. S., Eng., Surgeon to the Devon and Exeter Hospital and the Exeter Lying-in Charity; Lecturer and Examiner to the St. John's Ambulance Association. Sixth Edition. Philadelphia: P. Blakiston, Son & Co. 1888. Baltimore, Cushings & Bailey. Pp. 100. Price 75 cents.

This is one of the many manuals which should form a part of the library of every educated nurse.

ACTION OF SPIRITUOUS DRINKS ON THE LIVER.—Dr. Zenon Pupier publishes (*Archives de Physiologie*, May 15, 1888) an elaborate paper on the effects of various forms of alcoholic drinks on the structure of the liver. This careful physiological research confirms previous observations on the action of alcohol. Dr. Pupier finds that the prolonged use of alcoholic drinks—absinthe, red wine, white wine, alcohol—produces well-defined effects.

Separating the water of the tissue, it causes a desiccation that includes structural changes.

Nutrition is retarded and fatty deposits occur, corresponding, for example, to the *steatosis* of atheroma. At a more advanced stage, it disintegrates the membrane, reducing it to the fibrillary state, promotes the deposition of lime-forming cretaceous masses, and advances to the stage of *sclerosis*.

There are peculiarities in the character of the pathological changes belonging to each form of alcoholic fluid. Absinthe alcoholic drinks cause changes typically *cirrhotic*. With white wine the cellular degradation is especially pronounced.—*American Journal of the Medical Science.*

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BALTIMORE, JULY 7TH, 1888.

Editorial.

THE RELATION BETWEEN DIABETES MELLITUS AND DISEASES OF THE HEART.—The disadvantage of studying too exclusively one branch of medicine is that the specialist is apt to forget everything except what comes under his own department, until forced by clear symptoms to notice other parts of the body, and then his surprise is so great that he at once rushes into print. Or it may be that a steady contributor to medical literature finding lack of material attempts to work up some subject without sufficient foundation.

Dr. J. Mayer (*Zeitschrift f. kl. Med. Bd. XIV H.* 3) announces that the heart is affected in cases of diabetes mellitus. In a disease which so thoroughly invades the whole organism, calling forth a great variety of symptoms, it would be almost a miriacle if the heart did not escape untouched; yet the occurrence of a clear case of organic heart disease probably rarely stands in causal connection with diabetes mellitus. It is no wonder then that Seegen, Cantani, Senator, Leyden, Frerichs and others make no mention of this complication, and even Pavy in his report of 1360 cases of diabetes before the British Medical Association did not consider the heart worthy of notice. Dr. Mayer who has a large practice at Karlsbad, has collected 380 cases of which 337 are between the ages of forty and sixty years, and of these cases with reports of many others, he studies the symptoms of derangements in the heart and circulation. He found a certain number with weak heart, some with possibly dilated cardiac cavities and many had very ill-defined symptoms referable to the heart or that region. He infers that the changed condition of the blood must have some effect on the heart, and believes himself justified in inferring that the observations made by himself on heart disease in connection with diabetes mellitus are to be referred to the diseased condition of the body metabolism. All the patients showed a certain amount of cardiac weakness and he believes that he has proved that this cardiac weakness has its origin in the demands which the altered metabolism makes on the heart and which experience a partial compensation the earlier the organism begins to suffer and the sooner the formation of sugar and urea oversteps the limits within which a well-nourished kidney and heart can excrete them.

AN IMPROVEMENT IN TRACHEOTOMY.—The rivalry between the lovers of tracheotomy on the one hand and those of intubation on the other has been watched carefully by family physicians who do not expect to do either operation.

We have observed with interest the efforts made to perfect O'Dwyer's tubes, especially the addition of the hinged lid which opens and closes with the movements of deglutition.

One contribution to tracheotomy which seems of great promise has apparently received very little attention from surgeons. We refer to the suggestion which we have seen in a recent journal that the patient after tracheotomy should be made to breathe through a rubber tube opening below into the tracheotomy tube and above into the cavity of the closed mouth. The air would then pass in at

the nostrils, through the pharynx and mouth, thence through the rubber tube into the trachea and lungs.

The suggestion seems very worthy of trial, in patients of sufficient age, since one great source of danger to the patient —the drawing of cold dry air into the lungs—would thus be avoided. Proper joints and receptacles for saliva could doubtless be provided. We should like to have our surgeon-readers put this new method to the test.

Sounding of the Ducts of the Mamma.—It seems strange that while so much energy has been shown in the exploration of the hidden recesses of the body, the ducts of the mammary gland have until recently remained untouched.

As far as we know the first attempt at sounding them was recorded by Dr. A. K. Bond, who published in the *Medical News* of December, 1886, an account of a case in which he passed a blunt hypodermic needle in along the nipple ducts and injected through it, with success, astringent and anodyne solutions upon the inflamed surfaces of the ducts within the gland.

Our attention is now called to another attempt in abnormal conditions of the mammary gland to bring about a cure by passing delicate instruments along the ducts of the nipple to the seat of the trouble. Dr. G. W. Squires in the *N. Y. Medical Record* of June 2, 1888, in speaking of the engorgement of the lacteal ducts which is so often followed by abscess recommends that the contracted duct be dilated by a silver probe before the application of the breast-pump, or better, that the capillary catheter invented by J. W. Cousins, of London, to which a hand-bulb exhauster is attached, be passed in along the duct and the pent-up milk or pus be drawn off through it. By the aid of a lens, he says, we can accurately locate the duct which is at fault.

Whether this method recommended by Dr. Squires will prove successful in all cases or not, can only be shown by more extensive experience. At any rate it has now been proved that the ducts of the nipple may be easily and safely sounded either with or without the aid of a lens, and we have within our reach a new method of treatment which in suitable cases and with proper precautions may be of very great value in the treatment of diseases of the mammary glands.

Miscellany.

Hair-Washes.—We learn from the *American Analyst* that recent analyses have shown, that of the preparations for bleaching the hair to "the delicate golden shade so much admired by the court circles of Europe, and the best society of the United States," to quote from a label on one of the bottles, all depend for their action upon the decolorizing and corrosive influence of nascent oxygen or nascent chlorine. The bases used in the various nostrums for this purpose are peroxide of hydrogen, aqua regia, and bronzer's acid. Peroxide of hydrogen is the mildest and most innocuous of the trio named. It is a colorless liquid which destroys the natural color of the hair, and which, if used long enough, turns it an unnatural grayish-white. It is rather expensive, and is therefore used much less than the two other acids. It produces sores upon the scalp, and gives rise to skin-complaints that resembles tetter, salt-rheum, and scald-head. The two acids are equally vile. They attack and eat the hair and skin alike. The former they partly bleach, and partly burn to a handsome gold color; the latter they stain to about the same hue as does a light application of iodine. Besides the dermatologic troubles named, they cause maladies hardly distinguishable from eczema and erythema. One curious disease that they cause is an inflammation of the cells of the hair follicles. The cellular walls break down, and lymph, and often blood, is extravasated in appreciable quantities. All three bases produce falling-out of the hair and premature baldness.—*Science.*

Drunkenness as a Disease.—Dr. Godding, superintendent of the Government Insane-Asylum in Washington, has written a letter to one of the committees of Congress, in which, while showing that it would be unwise to confine inebriates with insane persons, he makes the following interesting remarks:—

"Inebriety as a disease is distinct from insanity. Inebriates resent being placed with the insane; nor are the insane, as a rule, proud of them as associates. Insane from the poison of drink, as they undoubtedly are while the liquor is in them, they now and then get committed to hospitals for the insane, and in their detention during convalescence they afford interesting though unprofitable psychological studies. Dissolute in habit, and idle in life, they are uncomfortable from the start. They are usually fault-finding and impatient at their detention, denouncing every body and everything about them. When quiet and seemingly at ease in their lot, they are studying how to smuggle in whiskey, or effect an escape. In them moral honesty and generous impulses are sadly wanting, and a condition of settled discontent characterizes the enforced abstinence of their hospital life. What they need is occupation and prolonged treatment in an industrial home, where they can be kept at work at enforced labor under the supervision of a judicious physician. As a rule, confinement in idleness does them little or no good."—*Science.*

A Risk of Travel.—The reported indisposition of the Duke of Edinburgh, from drinking impure water at a foreign station, gives prominence to what is perhaps the most usual and frequent source of danger in foreign and Continental travel. Many of the sanitary authorities who have looked into the question have, from time to time, uttered warnings to Continental travellers as to the dangers of the ordinary drinking water to be found abroad. The pollution of table water at foreign hotels and houses is due to a great variety of causes. The water supply of foreign cities is, as a rule, to which there are only few exceptions, taken from sources lamentably liable to sewage pollution, either in open streams or uncovered reservoirs, or from defective sanitation in the house supply. A large part of the domestic supply of drinking water is, moreover, from surface wells, which are constantly liable to sewage filtration. An examination, made only a few years since, of siphons of sparkling "seltzer" in a great continental city, disclosed the fact that they were horribly polluted with sewage, and that the effervesing fixed air with which they were charged only served to conceal unutterable contaminations of a most dangerous kind. Sir Henry Thompson and Dr. Herman Weber, who have both given attention to the subject, are very emphatic in their counsel to travellers to avoid ordinary drinking water abroad. The easiest and most agreeable means of avoiding the danger is the habitual use of a pure natural mineral water in lieu of the doubtful drinking water of the hotel or the private house.—*British Medical Journal*, June 2, 1888.

Note on the Power of Saccharin in Preventing Ammoniacal Change in Urine in Chronic Cystitis.—Dr. James Little in the Dublin Journal of Medical Science for June, 1888, in commenting upon the difficulties of preventing ammoniacal changes in the urine in chronic cystitis thinks it is better to keep the urine free from medicines given by the mouth rather than by washing out the bladder with warm water or antiseptic solutions. The substances formerly used such as quinine, tincture of the perchloride of iron, benzoic acid and the benzoate of sodium are liable to disagree with and cause sickness in older persons having irritable stomachs. Boric acid given in lemonade is perhaps better than those mentioned but even that fails. In several recent cases Dr. Little has used saccharin giving about six of the tabloids daily. In all these cases when the residual urine was drawn off it was free from the ammoniacal odor and most disagreeable.

The Abuse of Antipyrin.—That antipyrin is being very generally used without the advice of a physician appears from the evidence which had been obtained from both physicians and druggists. We are informed that it is not an uncommon thing for those who suffer from headaches to purchase the drug and take it in twenty-grain doses, entirely unconscious that they run any risk in so doing. Evidence is accumulating that antipyrin so used is fraught with danger, and there are already enough cases recorded of the production of alarming symptoms by small doses to put even physicians on their guard against the indiscriminate use of the drug.—*Brooklyn Medical Journal.*

The American Association of Obstetricians and Gynæcologists will hold its annual meeting in Washington, on the 18th, 19th, and 20th of September. The preliminary programme includes: The president's annual address, by Dr. William H. Taylor, of Cincinnati; a discussion on extra-uterine pregnancy; "The Relations of the Abdominal Surgeon to the Obstetrician and Gynæcologist," by Dr. Albert Vanderveer, of Albany; "An Operation for an Unusual Case of Subserous Uterine Fibroid," by Dr. Hampton Eugene Hill, of Saco, Me.; "Drainage in Abdominal and Pelvic Abdominal and Pelvic Surgery, by Dr. Joseph Price, of Philadelphia; "Double Ovariotomy during Pregnancy, a Successful Case going on to Full Term," by Dr. William Warren Potter, of Buffalo; "The Indications for Artificial Aid in Labor," by Dr. Thomas Opie, of Baltimore; "The Technique of Vaginal Hysterectomy," by Dr. James H. Etheridge, of Chicago; "The Surgical Treatment of the Perinæum," by Dr. William H. Wathen, of Louisville; "Laparotomy in Peritonitis," by Dr. E. E. Montgomery, of Philadelphia; "Tumors of the Abdominal Wall," by Dr. Charles A. L. Reed, of Cincinnati; "Uterine Fibroids; their Diagnosis and Treatment," by Dr. Thomas J. Maxwell, of Keokuk; "Desmoid (Fibroid) Tumors of the Abdominal Walls," by Dr. Edward J. Ill, of Newark; "Ruptured Perinæum," by Dr. J. Henry Carstens, of Detroit; "A Contribution to the Study of Pelvic Abscess," by Dr. Clinton Cushing, of San Francisco; "The Female Perinæum; its Anatomy, Physiological Function, and Methods of Restoration after Injury," by Dr. Henry O. Marcy, of Boston; "Heart Failure in the Puerperium," by Dr. Thomas Lothrop, of Buffalo; "The Treatment of Suppurative Peritonitis," by Dr. William H. Myers, of Fort Wayne; "Operative Treatment in Uterine Carcinoma," by Dr. George R. Shepard, of Hartford; "The Reflexes Reflected, or Some Things that Retard Progress in Gynecic Surgery," by Dr. Joseph Eastman, of Indianapolis; "Some Points in relation to the Diagnosis of Pregnancy in the Early months," by Dr. James P. Boyd, of Albany; "Vaginal Tamponnement in the Treatment of Prolapsed Ovaries," by Dr. W. P. Manton, of Detroit; and "The Methods of Success in Abdominal Surgery," by Mr. Lawson Tait, F. R. C. S. E., of Birmingham, England.

Action of Boiling Water on Typhoid Bacilli.—Wilchur of St. Petersburg has found that when a volume of boiling water equal to that of a gelatine culture of typhoid bacilli is used on the culture, the bacilli are only partly destroyed; and that when the volume of water is double that of the culture, all the bacilli are killed. Experiments on the dejecta of typhoid patients showed that when four times the volume of water was added to the dejecta, the bacilli were invariably destroyed.—*Science.*

Antipyrin in Whooping-Cough.—Dr. Dubousquet-Labordiere finds that antipyrin is an efficient remedy for whooping-cough (*Revue Gén. de Thérapeutique*, May 15, 1888). He concludes a clinical paper on this topic with the following:

1. Children take antipyrin without difficulty, and they easily bear its effects, as a rule.

2. The spasmodic condition is rapidly calmed, and in a few days the disease declines.

3. Its action is so prompt and so free from accidents, that it becomes a valu-

able remedy for a malady which may be very prolonged in duration, and have many complications —*American Journal of the Medical Sciences.*

Preparation of Milk in Summer.—Dr. E. A. Wood, of Pittsburgh, Pa., in the *Medical and Surgical Reporter*, says: The time is here for the summer complaints of childhood. Thousands of children were lost last year—shall the Angel of Death again cast his annual shadow over our homes? Have we learned anything since last year, and are we more competent than ever to stay the slaughter of innocents — the slaughtering that is a disgrace and a crime? Do we know of even one thing, trifling though it be, that shall assist in carrying children through the perils of the term now on us? That others may be encouraged to publish the facts and opinions in their possession bearing on the subject of infant feeding.

When human breast milk cannot be had in any case, procure the best cow's milk; get it fresh, morning and evening; keep it in a cooler in which nothing else but ice is kept; keep that cooler out of doors in the shade, or in an open hall or room, and not in a closet, pantry or cellar. Take one pint of milk and divide it in two equal parts; separate the curd from one-half, either by heat and calf's rennet—the latter preferably, because it not only more quickly separates the whey and the curd, but rennet is a real digester, and better than any artificial pepsin. Take the whey so separated, add it to the other half of the pint of milk, and feed as the child needs.

Several modifications will suggest themselves to the intelligent practitioner. Those who have faith in *pepsina porci* may use it to partially digest the whey milk. When this is done, the whey milk should be boiled to stop complete digestion. My experience is that fresh milk from grass-fed cows is more easy of digestion without being boiled. When the milk is not of that kind, and to destroy bacteria, it is perhaps better to boil it. The thing I wish to bring to notice is that weak stomachs can digest milk containing *half* its curd, but cannot digest all the curd. Life is too short to spend in arguing the advantages of whey over water as the diluent of milk. Those who cannot feel the force of such a procedure should continue to use water to dilute cow's milk. Milk whey has gone out of fashion, but whey will come in again, not as a fashion, but as food commending itself on principle and practice.

Milk whey is a much better fluid than water to add to the many preparations of beef in the market. Try it.

Every practicing physician should have a small food laboratory at his home, where he can experiment, and learn for himself the behavior of foods, and how to modify them for the requirements of his patients.

Escherich: Contribution to the Etiological Method of Treatment of Gastric Diseases in Infants. (*Arch. f. Kinderh.* [abstracted], ix. 3.)

The method which Epstein proposed of washing out the stomach has been simplified by the author in respect to the apparatus which he uses. He also recommends for irrigation purposes one-half per cent. solutions of resorcin or three per cent. solutions of benzoate of soda. His best results were obtained in cases of simple gastaic dyspepsia with fermentation; less satisfactory results attended the treatment of gastro-intestinal diseases, while the results in cholora infantum were least satisfactory. Treatment by irrigation of the intestine was less successful than that of the stomach, and of three hundred and seventy-seven children who were treated by that method, two hundred and fifty-nine recovered, fifty-five were not improved, and sixty-three died. Since the small intestine is not entirely accessible to antiseptic mechanical treatment the author sought to limit the processes of fermentation in this portion of the intestinal tract by the removal of fermentescible substances from the diet. Since fermentation of the carbo-hydrates is most likely to take place in the upper portions of the intestine, while albuminoid bodies are unaffected by this process in those localities, a rational in-

ference would be that the rigorous use of an albuminous diet would be the most effective means of preventing fermentation and the symptoms which proceed from it. Such a diet may consist of albumen-water, meat soups, beef-tea, and even raw meat. The use of peptones will be found very satisfactory. The unfavorable elements which are introduced into the intestine and cause fermentation should also be limited by the use of foods containing dextrine.—*Archieves of Pediatrics.*

Laxatives in the Treatment of Fatty Heart.—Kisch, in the *Internat. Klin. Randschau*, No. 10, 1888, prescribes a useful purgative for this condition as follows:

℞ Pulv. rad. rhei.,
Extr. alœs,
Ext. jalap, āā gr. 30.
Pil. mass. q. s.

Ft. pil. thirty in num.
Sig.—One pill at evening.

In anæmic patients:

Ferri sulph. pur. gr. 45.
Extr. alœs gr. 30.
Pil. mass. q. s.

Ft. pil. thirty in num.
Sig.—One pill morning and night.

When compensation is becoming exhausted digitalis may be combined with laxatives as follows:

℞ Pulv. rad. rhei.,
Ext. alœs. av.,
Pulv. fol. digital. āā gs. 30.
Pil. mass. q.s.
Ft. pil. thirty in num.

Ft. pil. thirty in num.
Sig.One pill every three hours.—*Med. News.*

The Value of the Bacillus Tuberculosis.—Dr. Percy Kidd and Dr. Taylor have lately made known the results of a prolonged investigation as to the value of the tubercle bacillus in diagnosis and prognosis. In regard to the former, in many cases where the physical signs were undeveloped or were masked by emphysema or bronchitis, the discovery of the bacilli in the sputa was of great aid in diagnosis, and also in some cases of rapid wasting without any physical signs in the chest. They pointed out that it was a distinct advantage to be enabled to give a definate diagnosis early instead of waiting for physical signs to develop. In reference to prognosis, they did not lay much stress upon the bacilli; they had not found that a large number necessarily indicated a rapidly increasing disease or a small number a chronic or actually stationary condition, and in this they were supported by most of the speakers, though one gentlemen was in favor of having the sputa sent up to him every week in order that he might arrive at a prognosis from the number of the bacilli, and he even thought that a prognosis might be given though the patient had never been seen.—*London Correspondent to New York Medical Journal.*

The Physique and Diet of the Soldier.—In a lecture at the Royal United Service Institution, Colonel G. M. Onslow expressed his views on "The Physique of the Soldier and his Physical Traing," and gave his experience as Inspector of Gymnasia. A man must eat to live, and a young man needs both plenty food and exercise to aid his growth and development. The average age of a soldiers is now 25 years, the minimum standard in height is 5 feet 4 inches, with a chest limit of 33 inches, while 769 men, 1,000 are 35 nches in chest measurement. Our age limit is lower than that of foreign armies, but our minimum standard is his. Colonel Onslow says the British soldier has not enough to eat, and that if we cannot give him more food, we should give him his last meal later than his tea at 4:30, as at present. Military drill is not physical training, and it is said that, *per ie*, the drill does little to render the men stronger and more supple; it is of no use to drill a man until he is made strong, active, and self-reliant by gymnastic training. Lord Wolsely agreed with the remarks of the lecturer, and referring to the propects of army recruiting, expressed his fears that diffi-

culties might occur in the future, from the decline of the physical condition of our young men in towns, and the decrease of the agricultural population. He then proceeded to advocate the provision of gymnasia in all Board schools, under the supervision of good drill instructors. In considering the physique of the young men, of London, we are glad to see that a new gymnasium has been opened in the old Queen's Theatre, Long Acre; the hall is spacious, lofty, well lighted and ventilated, and provided with every appliance and means of physical exercise,so that we may hope that something is being done to keep up the physique of our young men in London.—*British Medical Journal*, June 16, 1888.

Suture of Wounded Liver.—The *Riforma Medica* of June 9th, contains a full account of Professor Postempski's operation for wounded liver, of which mention was made in the Journal of May 5th, (p. 992). Antonio A., aged 28, was stabbed under the arch of the ribs, on the right side, on April 18th. The cutaneous wound, which was parallel to the costal margins, was five centimètres in length, whilst that of the liver (left lobe) was seven centimètres long, and three in depth at the deepest part. The patient, when seen, was in a state of profound collapse from loss of blood. There was no difficulty about the diagnosis, as exploration with the finger served to disclose the nature of the case. Professor Postempski, who had satisfied himself so far back as 1885, by experiments on dogs, that the liver-substance could be stitched without giving way, determined to try that mode of treatment. He accordingly enlarged the wound in the skin by five centimètres, and made a second vertical incision in the middle line across the first. The wounded lobe was pushed forward as far as possible, and, while the pieces of sublimated gauze, with which the wound had in the first instance been plugged, were being withdrawn, six points of chromicised catgut suture were passed through the whole depth of the wound with extremely fine curved needles. The sutures were very carefully tightened as they were introduced, the edges of the wound being at the same time gently pressed together, so that the loop of catgut did not draw them in contact, but merely kept them in apposition. The sutures were tied in a simple knot, and there was not the slightest laceration of the liver-substance through which they were passed. Hæmorrhage ceased at once, but the critical condition of the patient made it impossible to wash out the peritoneal cavity at all thoroughly, and Dr. Postempski believes that the greater part of the extravasated blood remained in the abdomen. There was no rise of temperature, however; but, on the second day after the operation, there was very abundant albuminuria, which lasted for twenty-four hours, when it completely ceased. The patient got up on the eighteenth day, and he is now perfectly well, without any local pain, or any appreciable enlargement of the liver.—*British Medical Journal*, June 16, 1888.

A Rapid and Simple Method of Reducing Dislocation of the Shoulder.—In all the methods ordinarily employed for the reduction of dislocations downward of the humerus the trunk is fixed and the head of the humerus is raised into the glenoid cavity. Dr. Abril inverts this proceeding; his plan is to fix the humerus and to make the glenoid cavity descend on to the head of the humerus. He claims for his method that it is most simple, easily and quickly done, that chloroform is not necessary to obtain muscular relaxation, that the pain is trifling, and that no assistants are required. He makes the patient stand with a crutch in his axilla; he then holds the hand of the affected side, making slight traction downward; the patient is now to let himself down as if he were going to fall on his knees, and as he falls the head of the humerus glides into its normal position, and the patient is surprised at finding himself cured.—*The London Medical Record.*

Medical Items.

Dr. J. J. Chisolm will spend the summer abroad.

Dr. C. C. Bombaugh sailed for Europe last week.

Prof. v. Bergman has been elected an honorary member of the St. Petersburg Chirurgical Society.

In response to the appeal for subscriptions the Building Fund of the New York Academy of Medicine has received nearly twelve thousand dollars.

Messrs. R. L. Polk & Co., publishers of the city directory, will issue soon a Medical Directory and Register for Baltimore, Maryland, and the District of Columbia.

During the past year 993 bodies were cremated in Buenos Ayres, of which number 742 were persons dead of cholera, small-pox, and other contagious diseases.—*Med. Rec.*

On the occasion of the celebration of his seventieth birthday, at Utrecht, on May 28th, the Medical Society of Munich elected Prof. Donders an honorary member of the Society.

Joseph Hyrtl, the eminent anatomist, has offered to endow six scholarships, in the Vienna Medical School, for worthy students without means, without distinction of nationality or creed.

An International Congress of Dermatology and Syphilography is to be held in Paris, August 15 to 22, 1889. At this time will occur the official inauguration of the new Museum of the Hospital St. Louis.—*Med. Rec.*

You *have no right to give the name or initials of a patient in describing his case in public print.* A case has recently been decided in France in which a physician was fined 500 francs for violating his privileges.—*N. C. Med. Jour.*

The Consul General at Honolulu reports that many lepers leave the Sandwich Islands as soon as the disease appears, the greater number coming to the United States, in order to prevent being banished to the Island of Molokai.—*Journal of the American Medical Association.*

A newspaper report contains an "interview" with Dr. Morell Mackenzie at the Hague, in which he admitted having concealed his knowledge of the late emperor's malady, in order to prevent a regency. It is hard to have to mix medicine with politics.—*Boston Med. and Surg. Jour.*

At a meeting of the State Board of Health held on the 4th day of July, 1888, the following letter from Attorney General Whyte was read:

ATTORNEY GENERAL'S OFFICE,
BALTIMORE, June, 28, 1888.

Dr. Jackson Piper, President State Board of Health:

DEAR SIR:—In reply to the request of the State Board of Health communicated in your letter of 21st ulto., I beg to say that I have examined chapter 429 of the Acts of the General Assembly, passed at January session, 1888, entitled: "An act to promote the public health and regulate the practice of medicine in the State of Maryland," and that, in my opinion, upon reason and authority, the said act is constitutional and valid. It is similar, in its main features, to acts which have been upheld by the highest courts in Illinois, Pennsylvania, West Virginia and in other States. Without enlarging on the subject, it seems to me that the decision in the case of the State vs. Dent. reported in West Virginia Rep. 1, decided Nov. 1, 1884, covers fully the points on which its constitutionality is successfully maintained.

Secondly. The law, in no way, applies to "any person who has been practising medicine continuously for ten years before the passage of the act."

Thirdly. I do not understand that the "board is to ascertain who are the parties subject to the law," but that if persons who come under the law practice *without a certificate*, they are to be arrested and tried as other violators of the law are dealt with.

Fourthly. The board is entirely dependent on the fee received for the execution of the law, and it has no power to raise money in any other way to carry out the purposes of the act.

Fifthly. The members can be summoned as witnesses to prove the non-compliance of any accused party with the law.

The failure of the lesislature in furnishing an appropriation for books, certificates, etc., cannot be remedied by the board, but if the fees received are not large enough to pay these expenses, the law cannot be executed until the legislature provides the proper material.

Yours, very truly,
WILLIAM PINKNEY WHYTE,
Attorney General.

After the reading of the above letter, the following resolutions were adopted:

Resolved, That the State Board of Health is in full sympathy with the scope and object of the "act to promote the public health and regulate the practice of medicine in the State of Maryland," approved April, 1888, and will endeavor, at the earliest time practicable, to overcome the failure of the legislature to provide, by appropriation, for the necessary books of record, certificates, etc.

Resolved, That the secretary of the board be requested to prepare and submit to this board at its next regular meeting appropriate forms for books of record, and for the several certificates required, together with an estimate of the cost of printing, lithographing, etc., and also to secure, as far as possible, a list of "reputable medical colleges," in the United States.

By order of the State Board of Health,
C. W. CHANCELLOR, M.D.,
Secretary and Executive Officer.

Original Articles.

LECTURES ON THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHÉ, M.D.,

Professor of Dermatology and Hygiene in the College of Physicians and Surgeons, Baltimore.

Lecture IX.

TREATMENT OF THE SYPHILIDES.

(*Continued from last issue.*)

Hebra in 1860, and Scarenzio in 1864, used mercurial preparations by the hypodermic method in the general treatment of syphilis. Ambrosoli, Berkeley Hill and Bergh practised this method, but G. Lewin, of Berlin, gave the subject especial attention and by his thorough and accurate researches placed the hypodermic injection of mercurials among the recognized methods of treatment. The preparations used are very multiform. Hebra, Lewin and others used the bichloride in solution, Scarenzio employed calomel suspended in gum water or glycerine, and more recently the albuminate, peptonate, formidate, bicyanide, biniodide and nitrate have been employed. At present calomel and yellow oxide suspended in fluid vaseline are used in two of the hospitals of Paris. In this country the method has a strong advocate in Shoemaker, of Philadelphia. The advantages claimed for it are that it shortens the treatment, that it is cleanly, that it does not disarrange digestion, that the effects of mercury upon the gums are rarely manifested, that the amount of mercury introduced into the system can be more accurately measured, and that the patient can be kept under better control of the physician. Each dose must be administered by the latter. These claims are all pretty strongly endorsed by the advocates of the hypodermic method, and most of them seem to be admitted. But, unfortunately a method of so much promise has strong disadvantages which militate against its general adoption. The injections are painful, they often leave inflammatory indurations and not rarely abscesses; the treatment is not so uniformly successful as some have claimed, and the painful character of the injections causes dissatisfaction and complaint on the part of the patients. On the whole, the advantages of the method, great as they are, do not sufficiently outweigh its disadvantages. The preparations most frequently used for hypodermic injection are the bichloride and calomel. Auspitz used the following formula:

℞ Hydrarg. bichloridi, grs. xv.
Sodii chloridi, ℥ss.
Aquæ destill., ℥iii.

M. S.—Fifteen drops to be injected every other day.

At the Lourcine Hospital in Paris, Dr. Balzer employs the following:

℞ Hydrarg. chlor. mit., grs. v.
Vaselini liq., ℥ i.

M. S.—Fifteen minims to be injected into the buttocks every 2–3 weeks. Abscesses occurred in about 12 per cent. of cases.

Dr. DuCastel of the Hôpital du Midi employs the yellow oxide of mercury suspended in the same menstruum. The abscesses seem to be less frequent after the use of this preparation than when calomel is used. When hypodermic injections are employed it is important to observe the precaution to inject deeply, avoiding bloodvessels and organs that might be seriously damaged by the puncture or the possible subsequent inflammation.

The pain of the injections can be lessened by the addition of cocaine to the injection. A formula proposed by Dr. Mandelbaum is as follows:

℞ Hydrarg. bicyanidi, gr. i.
Cocaini hydrochlorat., grs. v.
Aquæ destillatæ, ʒ iss.

M. S.—Fifteen drops as an injection.

By the observance of antiseptic precautions, the formation of abscesses could doubtless often be prevented.

The treatment of syphilis by fumigations, as extolled and practised by Langston Parker and Henry Lee, is not often employed in this country. Various forms of fumigating apparatus are sold by the surgical instrument makers, but a heated brick and a pail of water placed under a chair answers nearly as well as the most elaborate lamp or gas fixture. A half drachm of calomel is placed upon the hot brick, and the patient divested of his clothing and enveloped in a blanket takes a seat upon the chair. The mixed vapor of calomel and steam should be inhaled part of the time. It is probable that most of the effect of the mercurial is produced by that inhaled, and that very little is absorbed by the skin. It is important, however, that the mercurial vapor be mixed with the vapor of water if inhaled, otherwise it is likely to produce irritation of the lungs. Care must also be taken to have pure re-sublimed calomel.

After the fumigation the patient wraps the blanket about him and goes to bed. The sublimed calomel which has been deposited on the skin in a fine powder should not be wiped off.

A method of treatment, which is sometimes useful on account of its local effect is that by sublimate baths. These were first used by Baumé in 1760.

About half an ounce of the bichloride with an equal quantity of chloride of ammonium is dissolved in six ounces of water and added to a bath of 30 gallons at a temperature of 90–95° F. The patient remains in the bath from an hour to an hour and a-half. The method is especially useful in ulcerating and bullous lesions, and is perhaps more frequently employed in children than in adults.

Absorption through the skin is so irregular, however, that the mercurial bath is an unsatisfactory method of treatment. In some cases the effects of the agent upon the gums are promptly manifested, while in others a prolonged use of the baths is necessary before any results are obtained.

As accessary agents to the mercurial treatment, hot air and simple water baths are very useful. It is probable that the good effects of the various popular thermæ, such as the Hot Springs of Arkansas in this country, and of Aix-la-Chapelle in Europe are largely if not entirely due to their use as adjuvants and not as principal remedies. It is well known that the methods of treatment of syphilis at the places mentioned comprise the most thorough mercurialisation of the patients.

In the gummatous or tertiary stage of syphilis, while mercury is still useful, the main reliance must be placed upon iodine compounds. Although the iodides of sodium and ammonium are used to some extent, the potassium salt is the one most frequently employed. These preparations must always be well diluted in order to avoid irritation of the stomach. The usual dose is five to ten grains three times a day, but in certain cases where a rapid impression is desired, from twenty to forty grains may be given every 4 hours. One of the best vehicles for the administration of the iodide is milk. It covers the taste pretty well and prevents irritation of the stomach. The following is a convenient formula:

℞ Potassii iodidi, ʒ ss.
Aquæ q. s. ft. ʒ i.

M. S.—Twenty drops equivalent to 10 grains) in milk 3–4 times a day.

Sometimes an aromatic, or a bitter tonic are combined with the iodide as in these prescriptions:

℞ Potassii *vel* sodii iodidi ℥ii.
Aquæ cinnamomi,
Syrupi, āā, ℥iii.

M. S.—Tablespoonful 3 times a day.

℞ Potassii iodidi, ℥i.
Tr. gentianæ co.
Aquæ, āā ℥iss.

M. S.—Dessertspoonful 3times a day.

A favorite addition to prescriptions containing iodide of potassium is sarsaparilla or one or more of the vegetable alteratives. By some practitioners, the latter remedies are alone used, in the later stages of the disease, but most

physicians use them in combination with the iodides and sometimes also with mercury. A prescription which I have frequently employed, and apparently with more benefit than the simple solution of iodide of potassium is the following:

℞ Hydrarg. bichloridi, grs. ii.
Potassii iodidi, ʒ ss.
Syr. sarsaparillæ co., ʒ vi.

M. S.—Dessertspoonful 3 times a day, after meals.

A considerable number of quack nostrums against syphilis have as their active ingredients mercury, iodide of potassium, and some of the vegetable alteratives.

During the last five years a combination of vegetable alteratives, known as *McDade's formula* has been largely used, principally on the recommendation of the late Dr. J. Marion Sims. The original formula consisted of a decoction, but the following is said to be also effective:

℞ Ext. sarsaparillæ fl.
Ext. stillingiæ fl.
Ext. lappæ minor fl.
Ext. phytolaccæ fl., *āā* ʒii.
Tr. xanthoxyli carol., ʒi.

M. S.—Tea to tablespoonful 3 times a day in water before meals.

Under the name of *Syrupus Trifolii Comp.*, Messrs. Parke, Davis & Co., have introduced a preparation containing trifolium pratensis, stillingia sylvatica, lappa officinalis, phytolacca decandra, berberis aquifolium, cascara amarga, and xanthoxylum Americanum, with eight grains of potassium iodide in each fluid ounce. I have used the formula with good effect in some cases, but the dose to be effective should be at least half an ounce three to four times a day.

One of the old alterative prescriptions is that known as "Zittmann's decoction." It is largely used in Vienna, and it is said, with excellent results. Two preparations are used, the stronger and the weaker. The stronger decoction contains calomel and cinnabar while the weaker contains only vegetable alteratives and aromatics. One pint of each is to be taken in the course of 24 hours.

Other methods of treatment, as that by iodoform, nitric acid, gold, potassium bichromate and tayuya have not fulfilled the promises made in their favor by certain writers. The favorable reports of potassium bichromate by Güntz should stimulate further experiment with this remedy. The tablet triturates made by the manufacturing druggists ought to be a good form for administration. It is extremely liable to derange the stomach and should hence be given in minute doses. One tablet containing $\frac{1}{50}$ gr. could be safely given every two hours, and gradually increased to two or three tablets at the same interval.

The most carefully conducted medicinal treatment is likely to fail of its best results if hygienic measures are neglected. The syphilitic patient should be well fed, guarded against undue exposure or overwork. His skin should be kept clean and active by baths. The clothing should be appropriate to the season, and especial attention should be paid to the toilet of the teeth. Special tonic medication will often be necessary, not only to counteract the depression due to the syphilitic virus, but the spoliative effects of certain remedies, such as mercury and the iodides in large doses. Iron, cod-liver oil and preparations of hypophosphites are often required to keep up the strength of the system.

Duration of General Treatment.

In nearly all diseases coming under the notice of the physician, the special treatment is discontinued when the manifestations against which the treatment is directed have disappeared. In syphilis, on the contrary, a large proportion of practitioners recommend that treatment be continued for a term of months or years, irrespective of the presence or absence of lesions indicating the continuance of the malady. The reason given for this is that the disease, may be present in a "latent" form, without giving rise to symptoms. In the present state of knowledge concerning

the pathology of syphilis any speculations upon this subject would be premature in a practical course of lectures like the present. As the result of observation, however, most syphilographers are agreed upon the necessity, or advisability at least, of prolonging the specific treatment of syphilis, either continuously, or with occasional breaks, for two or three years, in order to completely cure the disease, and prevent its subsequent recurrence. The plan of treatment which finds most favor at present is that developed by Dr. E. L. Keyes, of New York, and which is generally known as "the tonic treatment of syphilis by mercury." Dr. Keyes first finds by experiment what he calls the "full dose" of mercury which the patient will stand, and then diminishes this to one-half or one-third, which constitutes the "tonic dose." To ascertain the "full dose" he begins with a small dose of the mercurial,—say $\frac{1}{6}$ grain of the green iodide—and increases this very gradually until some effect is noticed upon the gums. When the "tonic dose" is established, this is continued uninterruptedly for three years or more. After this time the syphilis can usually be pronounced cured, although even then relapses sometimes occur. Under the influence of these minute doses of mercury the red corpuscles of the blood increase and the patient's general condition improves. Mild outbreaks of syphilitic symptoms sometimes occur, but the latter usually disappear under the continuance of the "tonic dose," or if the the physician thinks best, the "full dose" may be resumed until the manifestations disappear when the "tonic dose" is again taken up and proceeded with. In case of gummatous lesions, iodide of potassium may be given alone, or side by side with the "tonic dose" of mercurial.

The intermittent plan of treatment consists in giving moderate doses of mercury for a time—say a month or two after the disappearance of active symptoms—and then intermitting for two to four weeks during which iodine or tonics may be given. This course is recommended by such eminent syphilographers as Fournier and Taylor, but in my experience, both of the methods here sketched are difficult to carry out. Few patients will persist in the use of medicines when they can see no use for it, and the general treatment in nearly all cases resolves itself into the treatment of individual outbreaks. Where the full co-operation of the patient can be obtained, the continuous administration of small doses—the Keyes plan—is rational, but I am confident the instructions of the physician will be obeyed in only a small minority of cases.

Salivation should be avoided, if possible, in the treatment of syphilis. However, in spite of every care it sometimes occurs. Prophylactically, the teeth should be thoroughly cleansed several times a day, especially following meals, and any defects in the teeth should receive the attention of the dentist. When salivation occurs the internal use of chlorate of potassium should be at once resorted to. I am accustomed to combine it with bicarbonate of soda, and think better results are obtained than when the chlorate is used alone.

If the salivary secretion is very free, the use of belladonna is rationally indicated.

As a mouth-wash I have found the following very efficient and pleasant:

℞ Acidi carbolici puri ʒ ii.
Glycerini.
Tr. krameriæ, *āā* ʒi.

M. S.—A teaspoonful in a wineglassful of water as a mouth wash.

A 2–3 per cent. solution of acetate of alumina is also a very efficient mouth-wash. A dilution of fluid extract of hydrastis may be used for the same purpose.

Local Treatment.

In the erythematous syphilide especially when it occurs on the scalp and face, the application of calomel, or ammoniated mercury ointment often hastens the disappearance of the eruption. The following is especially useful when the eruption is localized about the angles between the nose and cheeks:

℞ Hydrarg. ammoniat., gr. xx.
Glyceriti amyli, ʒi.

M. ft. pasta.

When localized in the palms, the same application, or a 1—2 per cent. red oxide of mercury ointment should be applied at night and leather gloves worn.

For the balanitis which sometimes occurs as a consequence of the erythematous eruption upon the glans, a weak bichloride solution (1 : 2,000) may be applied, or the following may be painted on with a camel's hair pencil once daily:

℞ Hydrarg. bichlor., gr. ii.
Alcoholis, ʒi.

M.

The same application is useful in erythematous vulvitis, and in the red or grayish patches occurring on the tongue in syphilitic subjects.

Corrosive sublimate baths (ʒi—iv to each bath) may also be used when the erythematous eruption is general.

In the papular syphilide of the face and forehead I have found the white precipitate ointment promptly effective. Where an ointment is objectionable the following lotion renders good service.

℞ Hydrarg bichloridi, grs. iv.
Glycerinæ, ʒi.
Sp. vini rectif., ʒi.
Aquæ aurantii flor., ʒiii.

M.

Dry, scaly papules of the palms and soles yield most rapidly to mercurial ointment, applied at night after soaking the hands and feet in hot water for ten or fifteen minutes. During the day the above bichloride lotion or the glycerite of starch and white precipitate may be used. If there is much infiltration it is necessary to destroy the superficial epidermic layer with a strong solution of caustic potash (ʒss : ʒi). This is mopped on and immediately washed off with warm water, after which one of the above mentioned mercurial ointments may be applied. Sometimes an ointment of salicylic acid (3 to 5 per cent.) alone, or combined with resorcin (4 per cent.), or white precipitate answers better.

For moist papules, Zeissl recommends careful cleansing with warm water, then applications of salt water and dusting with calomel. Ricord advises solution of chlorinated soda, followed by calomel powder. In many cases dusting the lesions with calomel and keeping them dry, and preventing friction by covering them with absorbent cotton, will produce a rapid cure. The importance of cleanliness in this form of syphilitic eruption cannot be over-estimated. The offensive odor is best destroyed by frequent washing with dilute liquor sodæ chlorinatæ (1 : 10). The late Mr. Victor de Méric used with good effect the following:

℞ Hydrarg. chlor. mitis,
Pulv. zinci oxidi, āā ʒii.
Ungt simplicis, ʒi.

M. ft. Ungt. S.—Apply 3 to 4 times a day.

Lang uses a dusting powder of salicylic acid and pulverized starch, as follows:

℞ Acidi salicylici, gr. xx.
Pulv. amyli, ʒi.

M.

The salicylic acid should be in the form of an impalpable powder, otherwise it causes considerable pain.

The pustular syphilide, if the pustules are unbroken, is benefited by sublimate baths. If there are small ulcers covered with crusts and scabs, the latter should be softened and removed by the aid of a warm bath, and the lesions dusted with calomel, oxide of zinc, bismuth or starch. Calomel ointment (5 to 10 per cent.) is also useful. If the remaining ulcers are slow to heal, they may be touched with solid nitrate of silver, or tincture of iodine, and then covered with calomel ointment, or thinly spread mercurial plaster.

For the small pustular syphilide of the scalp, Taylor recommends:

℞ Ungt. hydrarg. nitrat, ʒii.
Petrolati, ʒi.

M. ft. Ungt. S.—To be applied after shampooing.

The following makes a more agreeable pomade:

℞ Ungt. hydrarg. nitrat, ʒii.
Balsam. Peruv., ʒss.
Petrolati, ʒi.

M. ft. Ungt.

The tubercular and gummatous syphilides will usually yield to mercurial plaster kept constantly applied. Gummata often resemble abscesses and boils very closely, and the temptation to plunge a bistoury into them with a view to evacuate the contents is exceedingly great. Absorption will, however, in most cases follow the application of mercurial plaster. In obstinate cases of the tubercular eruption, chrysarobin with salicylic acid in collodion, as in the following prescription, may be painted on once a day with a camel's hair pencil:

℞ Chrysarobini, ʒss.
Acidi salicylici, ʒi.
Collodii flexilis, ʒiss.

M.—Put a camel's hair pencil in the cork.

In some cases, scarifications, followed by mercurial plaster, or destruction with the galvano-cautery, or by electrolysis, may be desirable in order to hasten the disappearance of a dense infiltration.

Ulcerated gummata should first be cauterized with nitrate of silver, or galvano-cautery, or the infiltration scraped out with the curette, and then dressed with iodoform in powder, or the following ointment:

℞ Pulv. iodoformi, ʒi.
Bals. Pernvian, ʒss.
Cerat. simplicis, ʒi.

M. ft. Uugt.

Lotions of carbolic acid (2 to 4 per cent.) are also useful. In some cases nothing seems to answer so well as the simple mercurial ointment.

Lang injects a solution of iodine into the neighborhood of large gummata, or into the infiltration itself. The formula he uses is as follows:

℞ Iodini, grs. iij.
Potassii iodidi, ʒss.
Aquæ destill, ʒv.

M. S.—A few drops to be injected by means of a hypodermic syringe.

Zeissl uses the following stimulating ointment in ulcerating gummata:

℞ Argenti nitrat, gr. ij.
Balsam. Peruv. ʒss.
Ungt. simplicis, ʒij.

M. ft. Ungt.

Syphilitic alopecia demands some attention from the physician, as patients are usually extremely anxious to preserve their hair. When the defluvinm is accompanied by seborrhœa, the remedies appropriate to that condition should be used. The scalp should be shampooed once or twice a week with spiritus saponis kalinus of Hebra, followed by the alternate use of a 2 per cent. solution of resorcin in bay rum, and a 4 to 8 per cent. white precipitate ointment. Taylor uses the following hair tonic:

℞ Tr. cantharidis, ʒiss.
Tr. capsici, ʒiv.
Ol. ricini, ʒiss.
Alcoholis, q. s. ft ʒviij.
Ol. neroli, q. s. to perfume.

M. S.—Use once a day. Cutting the hair is unnecessary.

Onychia is best treated with a non-irritating mercurial ointment, which can be kept in contact with the diseased nail all the time. The glycerite of starch and calomel or oleate of mercury (2 to 4 per cent.) are good applications. In paronychia, due to syphilis, the fingers should first be immersed in hot water for ten or fifteen minutes, and afterward enveloped in mercurial ointment or mercurial plaster. When there is much pain, inflammation or ulceration, painting with solution of nitrate of silver, tincture of iodine, and afterward dressing with iodoform and enveloping in mercurial plaster may give good results. Sometimes it is necessary to trim the nail so that the applications can be made directly to the seat of the infiltration. Corrosive sublimate collodion (1 per cent.) is a cleanly and efficient application in the dry form.

When paronychia effects the toes the nails should be carefully trimmed to prevent irritation and pain on walking.

The dilute solution of sub-acetate of lead, to which tincture of opium has been added, will often promptly relieve the pain. Cocaine and belladonna ointment is also useful in some cases where the pain is very severe; but probably no single remedy is so effective in relieving this symptom as bathing the effected limb in hot water.

THE MANAGEMENT OF DELIVERY PRIOR TO THE SEVENTH LUNAR MONTH.*

BY DR. WILLIAM H. PARISH, M. D.,
OF PHILADELPHIA.

In the management of delivery prior to the seventh lunar month, the welfare of the mother is alone considered. The non-viability of the embryo or fœtus removes it beyond consideration. It is true that the question as to whether the threatened abortion or miscarriage is inevitable or not will frequently arise, and will challenge our most anxious study, for upon the continuance of the pregnancy hangs the life of the intrauterine being if it is still living. It is my purpose, however, in this brief communication to discuss the management of only inevitable deliveries prior to the viability of the offspring, and not treat *in extenso* of any other part of the general topic of abortion or miscarriage.

The impossibility of ascertaining the number of abortions occurring in any large community has been generally recognized, so that the conclusions based upon figures given as to the proportional ratio of the number of deliveries of non-viable children compared with labors after the seventh month are unreliable. It it my belief, also, that the mortality following abortion or miscarriage cannot at present be arrived at even to an approximative degree. The desire to conceal the cause of death either because of the illegitimacy of the pregnancy, or because of criminal interference, or because of the known tendency of the gossiping, to ascribe all such deliveries, especially if fatal, to criminal interference, leads to the writing of misleading certificates. Some of the deaths ascribed to septicæmia, or pyæmia, or typhoid fever, etc., are deaths following abortions or miscarriages. Treatment must be based, however, not only upon the actual risk of a fatal result to the mother but also upon a full appreciation of the fact that improperly managed deliveries of non-viable offsprings entail upon the woman a number of serious conditions. Subinvolution of the uterus and of all the structures functionally associated or closely related by position is of frequent occurrence. Septic endometritis with septic endosalpingitis, ovaritis, and localized peritonitis, adhesions, crippled ovaries imprisoned, it may be, in lymph deposits, fixed and occluded tubes, permanently damaged endometrium, acute uterine flexions and prolapse, and septic blood infection with impaired nutrition and nerve exhaustion; such are, in addition to a fatal termination, some of the results to be guarded against by judicious treatment. Again, many cases of acquired sterility are traceable to abortions or miscarriages, and extrauterine pregnancy, known now to be of greater frequency than was formerly supposed, may be doubtless, in many instances traceable to tubes damaged by abortions.

He, then, who bases his treatment upon only the desire to save his patient from death, has not grasped the full indications of his case. To prevent death from hemorrhage and from intense blood poisoning is certainly his duty, but not his whole duty. His whole duty rests upon the indication of restoring the woman to the conditions of health both locally and generally, so that the various structures, especially of the pelvis, may be uninjured, and the various functions, especially of the sexual and related organs, may be performed with physiological ease and safety. Delivery during the early weeks of pregnancy is attended with a minimum of risk to life, yet of subinvolution, often with endometritis and endosalpingitis, frequently follows such an abortion. About the third month begins the actual danger of death from hemorrhage and septicæmia, and this danger increases as the period of pregnancy at which delivery occurs advances up to the time when viability

of the child begins and the phenomena of labor at full time more or less pertain. It should be borne in mind that crippling of the functional sexual capacity of the woman is liable to result whatever the period of non-viable delivery.

The treatment of such a delivery is divisible into the expectant and the active plans. The chief difference between these two plans consists, on the one hand, in securing artificially the emptying of the uterus if nature does not effect this promptly, while on the other hand, such interference is strictly avoided, at least until symptoms determine danger to the patient. During the early weeks, there not arising practically any danger of loss of life, the plan of non-interference is not departed from by its advocates, and is adopted by not a few of those who resort to the more active treatment in the more advanced deliveries.

In early abortions, say prior to the end of the second month, in addition to rest for eight or ten days in bed or on the lounge, I have practised during late years antiseptic cleansing of the uterine cavity by means of one injection of a corrosive sublimate solution 1 to 4000; after the escape of the ovum I resort to only one injection and alway use a return tube catheter. I have not thought it necessary to resort to the curette prior to the second month, except when by reason of instrumental interference septic infection is especially liable. During the third month, in addition to the antiseptic intrauterine injection, I use a smooth wire curette, preferably immediately after the escape of the ovum, resorting at the same time to the injection. It is during and after the third month that dangerous hemorrhage may arise. If the patient is confined to the recumbent posture danger from this source, however, rarely occurs. It the bleeding appears, however, before the os is sufficiently dilated to admit of emptying the uterus, I tampon both the cervical canal and the upper vagina. For this purpose I prefer strips of baked cloth, because of the ease of introduction and of removal. Antiseptic syringing is resorted to both before the introduction and after the removal of the tampons. The tampon should not be resorted to as a routine treatment. Hemorrhage that is not controlled by the postural treatment and by cold applications, is the only indicati on for the tampon. After the os is dilated the best way of treating the hemorrhage is to empty the uterus and to inject into its cavity hot antiseptic water. In the absence of serious hemorrhage, the rule to avoid rupturing the membranes should be rigidly adhered to, inasmuch as an unbroken ovum tends to prevent or to check hemorrhage, and if the ovum is delivered with unbroken membranes, the placenta is most likely to be expelled in an intact condition. If the membranes have been broken, the embryo or fœtus usually escapes from the uterus, while the placenta and membranes remain within the uterus and are probably adherent to it. Suppose the embryo or fœtus has escaped, then, as is well known, the placenta and membranes will usually be expelled within twenty-fours, yet in a large proportion of cases they will remain within the uterus for days, weeks, or months. Does the continuance of the placenta within the uterus for even a few days at a non-viable period of pregnancy bring dangers to the patient? The answer to this must be absolutely in the affirmative. Such danger is a very considerable one to life from both hemorrhage and septic infection. And even should the patient escape with her life, I do not believe that anyone ever escapes without serious injury to the child-bearing apparatus. Under such circumstance arise conditions which are likely to produce sterility or to determine subsequent abortions. Such patients suffer, it may be throughout their sexually active lives, with disturbances of the functions of the vagina, uterus, tubes, ovaries, bladder, and rectum with varying degrees of other local and constitutional suffering.

Septic changes of the products of conception under such favorable conditions of warmth, moisture, and contact of atmospheric air are developed so rapidly, that although absorption is probably not so rapid as at or near the full period of gestation, no one can say how soon the process of septic infection begins. The

incipiency of such blood-poisoning is not heralded by any definite symptom. Even the rise of temperature, as shown by the thermometer, is not fully reliable unless observed every hour or two, and to wait until hemorrhage, or a rapid pulse, or a chill, or decidedly high temperature supervenes, will prove in not a few instances to be waiting until a fatal result is inevitable. Or should the uterus have emptied itself within a few days without evidence of danger of death, still in the great majority of such cases I believe that grave, and it may be permanent local damage will have resulted. We are told to let the placenta remain until there are evidences of danger and then to remove it. Wherein is benefit to be derived from such a rule of practice? Is it not wiser to take due precautions against fire than passively to await the development of flames within the building? An abortion or miscarriage is a non-physiological accident, it is unnatural and pathological. There is no weight then in the argument that artificial removal of the placenta is unnatural and unphysiological and hence should not be resorted to. Its retention brings to the woman her greatest danger both as to life and to future usefulness. A uterus promptly and rightly emptied, uninjured by traumatism and rendered aseptic, becomes a source of comparatively little, if any, danger.

As in labor after the child has become viable, so in abortions or miscarriages ergot is of great service after the uterus is empty. It then encourages involution, checks excessive lochial flow, expels clots, and lessens septic absorption. Before the uterus is empty this drug is seldom of more than limited value, and often is productive of actual harm.

When the hemorrhage is considerable and the ovum is intact, its administration will aid in controlling the loss of blood, but even here the tampon is usually sufficient. I believe that I have repeatedly seen the use of ergot retard the completion of the delivery by determining an undilatable condition of the cervix. Such belief has been strengthened by finding that under such circumstances the administration of an opiate hastens the delivery by relaxing a cervix that has been rendered rigid by ergot. In incomplete miscarriage there is nothing more uncertain than the action of ergot. After its use the uterus may not empty itself for days or weeks, while the cervix closes so as not only to prevent the escape of the placenta, but also to prevent easy artificial extraction.

If you decide upon emptying the uterus, what is the best method of doing so? Prior to the third month the small size of the cervical canal renders the introduction of the finger difficult, and the curette is here sufficiently efficient, either before or after the escape of the ovum. The thickened decidua may then be readily removed with this instrument.

After the third month we have chiefly the placenta to deal with, and here the introduced finger is safer, more efficient, and more reliable than any curette. The finger more thoroughly and more certainly removes all the products of conception, and tells the presence or absence of such complications as polypi, fibromata, etc. When reliance is placed solely on the curette, the uterus may be supposed empty when it is not; fragments of placenta and of membrane, or even the entire placenta may be left, with extreme risk to the patient.

If one is present at the time of the escape of the embryo, and the placenta remains, he should at once, while the os is dilated, introduce his finger into the uterus, and while depressing and steadying the uterus with the other hand over the abdominal wall, dissect off *en masse* and completely the secundines and remove them. To effect this it may be necessary to give an anæsthetic. After emptying the uterus it should be at once syringed with a hot corrosive sublimate solution.

There will be, in all probability, no indication for a repetition of the intrauterine injection, though daily intravaginal antiseptic syringing for eight or ten days has been my practice. If the case is not seen until several hours have elapsed and the placenta is still within the uterus, and ergot has not been administered, the os will be sufficiently dilatable to admit of an

immediate resort to the prompt treatment. If at that time the cervix has already contracted because of ergot, the suspension of the ergot and the administration of an opiate, with non-interference of a few hours, will secure a dilatation of the os to such an extent as to permit the emptying of the uterus with the finger. If a number of days or weeks, or months, have elapsed and the symptoms indicate an incomplete emptying of the uterus, and the cervical canal is closely contracted, it will be better to dilate either with laminaria tents or with graduated bougies and to introduce the finger, than to rely upon any form of curette. After grave septic poisoning has occurred, a cervical canal that has been previously contracted undergoes a relaxation, and the placenta becomes detached or is so loosely adherent that its removal with the finger is usually a very simple procedure, and is, according to even the expectant practitioner, urgently demanded; but, immediately following removal of the placenta under such circumstances, evidences of more intense poisoning are frequently observed, and in many such cases a fatal termination eventuates.

There is but one form of curette that should ever be used for the removal of any of the products of conception. The perfectly dull wire curette is the only safe one. Every form of the sharp-edged instrument should be absolutely avoided. Simon's scoop is a dangerous instrument in the hands of the most careful. Much of the opposition to the curette is based upon the use of that or other cutting instrument. Even with the dull wire due caution must be used not to injure the uterus. A softened womb may be penetrated by even a dull instrument. My preference for the finger over the curette is based, however, rather upon the uncertainty as to the efficient working of the dull curette than upon its dangers. It would seem scarcely necessary to caution any one not to mistake the somewhat elevated and roughened placental site for portions of the placenta itself; but in one instance I saw such a mistake made by an inexperienced gentlemen who made active efforts with Simon's scoop until the uterine tissue was extensively gouged into by that dangerous instrument. Experienced men have left large masses of placenta—in fact, the fœtus and its placenta both—*in utero* after the cavity has been curetted. The possibility of double pregnancy with separate placentæ must not be lost sight of. I have seen an instance in which the physician removed with his finger under anæsthesia one fœtus with its secundines, and left within the uterus unrecognized a second fœtus and its placenta until uterine contraction secured their expulsion.

I have not referred to the various complications of non-viable deliveries. They are numerous and may call for special additional measures, but the management of the delivery rests upon no peculiar principle. Criminal abortion brings with it greater dangers, but usually the management does not differ materially from that of the non-criminal delivery. In the criminal variety septic infection may occur before the abortion or miscarriage has begun, and the expectant plan of treatment is attended with the greatest dangers. An injudicious introduction of the sound may engender a septic inflammation of the endometrium and determine a fatal result before any part of the ovum is expelled. Under such circumstance non-interference contributes to death.

In inevitable abortion I have repeatedly emptied the uterus by compressing the body between two or three fingers within the vagina and in front of the uterus, and the other hand over the abdomen. I have also secured, in a few instances, a prompt ending of an incomplete abortion or miscarriage by the injection of hot water into the uterine cavity, of course securing its ready outflow. The hot injection awakens active corporeal contractions with cervical relaxation, and, if the fluid is antiseptic, diminishes the danger of infection.

The Southern Surgical and Gynæcological Society will meet in Birmingham, Ala., on the 11th, 12th and 13th of September. The programme includes papers by a large number of the leading surgeons and gynæcologists of the South.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING HELD JUNE 11, 1888.

The President, J. Solis-Cohen, M.D., in the chair.

Dr. William H. Parish read a paper on

THE MANAGEMENT OF DELIVERY PRIOR TO THE SEVENTH LUNAR MONTH.*

DISCUSSION.

Dr. William Goodell: I take exception to but one point in this admirable study, and this is, to the use of the dull curette, I have given up the use of the dull curette for several reasons. There is great danger of wounding the endometrium in its soft, thickened, and vulnerable state. Then there is this very danger, the speaker has mentioned, of mistaking the placental site for tissue that should be removed, and the further danger, which he also admits, of perforation. I am sure that I once penetrated the wall of the uterus with a sound, and without using any force—though, fortunately, I escaped an evil result. There is danger of wounding that portion of the uterine wall which is not at all implicated, if I may so express it; and especially, two or three days after the abortion, would this cause a liability to the creation of a fresh raw surface upon perfectly healthy tissue, with additional danger of infection.

I use two styles of forceps, one a small catch-forceps, which will seize anything that projects, or, still better, a small fenestrated polypus forceps, which can grasp any projecting mass, however small, and that only.

Dr. Regar: How can we tell that the uterus is completely cleaned out? The finger cannot always determine with certainty. How long are we to keep up examinations and attempts at cleansing?

Dr. J. B. Walker: May we not answer the preceding speaker by saying that as long as the os is patulous the uterus contains something that needs removal: after removal contraction will occur. That has been my experience in several cases. I would ask Dr. Parish whether the rule holds good in all cases?

Dr. H. A. Slocum: I rather fear to follow the advice given to permit the ovum to escape entire. I remember two cases which fortunately terminated favorably, but which gave me much anxiety, in which the escape of the ovum entire was followed by alarming hemorrhage. One of these was in a well-developed florid woman who had a history of repeated miscarriages. When I was summoned she was bleeding slightly, and the labor pains were strong and constant. With my finger in the vagina I waited for the ovum to be expelled entire. It came with a gush of blood that blanched the ruddy face of the patient and left her pulseless. I was compelled to remove the pillows, elevate the foot of the bed, and with finger and hand endeavor to excite uterine contractions, after which, with hot water injections and other appropriate measures, the bleeding was controlled.

When a uterus is distended with its contents, and the placenta leaves its site, and the large mass is suddenly expelled, it seems to me that the sinuses will be left wide open, and the contractile vigor of the uterus will not suffice to close them.

I agree with the advice to remove the placenta as soon as possible. I remember a case, however, in the practice of a distinguished practitioner, in which, for what reason I do not know, it was left for six weeks free in the cavity, becoming hard and leathery, and was then removed under anæsthesia. My only connection with the case was to give ether, so that I know nothing further of the circumstances than that the placenta remained for six weeks without giving rise to any bad symptoms.

Dr. W. E. Ashton: I would take exception to the speaker's low estimate of

*See page 207.

the value of ergot. While I will agree that it is contra-indicated, except with a tampon, yet if the tampon be introduced and ergot then administered, the effect will be much more prompt and sure, and the presence of the tampon will prevent anything like hour-glass contraction. After a complete abortion I should consider intra-uterine antiseptic irrigation uncalled for, and rather dangerous as tending to introduce air, and, therefore, germs, into a uterus which is otherwise in an aseptic condition.

Dr. Parish: In reference to the use of the dull wire curette, Dr. Goodell could not have heard my remarks, or I must have failed to express myself clearly. I do not use it except at one stage, that is at the third month, never after the placenta has been formed. I prefer the finger for many reasons, as I stated. Even with the dull instrument there is some risk of injury, and the method is unreliable. Dr. Goodell and I accord perfectly, after the third month. Before the differentiation of the placenta, however, the smooth wire curette will detach and remove the deciduous membrane with no danger.

I have used forceps, though not exactly the same form as spoken of, but the objection is that we cannot be sure with any form of instrument whatever that the uterus is empty. The finger alone tells us that. It is not only a therapeutic but a diagnostic appliance. It must be very rare for the uterus to possess the power to expel the ovum unaided, and then fail to take care of itself. There must be some special morbid condition to which the hemorrhage is due. In the case narrated by Dr. Slocum, with its history of frequent miscarriages, I should have suspected a polypus.

I do combine the use of ergot with the tampon, should the latter be insufficient when the ovum is intact, especially if the ovum is intact to give a smooth mass on which to contract. Antiseptic injections are indicated after such a pathological process as a miscarriage. I doubt if the uterine cavity usually closes air-tight after such a process. Not infrequently there is a separation of the uterine from the fœtal layer of the placenta with adhesion of the uterine portion. This adherent maternal layer is liable to give rise to septic inflammation and general infection.

The patulous condition of the cervix, is to some extent, an evidence that the uterus is not empty, but the reverse does not hold good. It would be unsafe to conclude that everything had been expelled because os was found to be contracted.

Correspondence.

LONDON LETTER.

London, June, 23rd, 1888.

The Continental schools have held out so many and varied attractions to the student of medicine, and the prevailing fashion has set so steadily in that direction, that comparatively few Americans are found in the hospitals of London. This is to be regretted for several reasons, the most important being, that we in America are in need of the painstaking, thorough, clinical work that is so characteristic here. Then too no time is lost in becoming accustomed to a foreign language, as on the Continent. Of course there are disadvantages. There are very few private classes or courses given here, and the foreign student is not given the prominence that is awarded him in Vienna, for example. The teaching is intended, as it should be, for the English student. I have heard of some complaints from German students, that more attention is shown to foreigners in many of their Universities, than to their own men. On the other hand nothing could exceed the courtesy that is extended to a visitor in the London Hospitals. Everything is open to him, and he is free to attend any clinic or lecture he wishes to avail himself of. The thing that impresses one most in regard to the work here, is the minuteness with which the clinical examinations are made. The teaching is done not by lectures, or, at least, very little in this way, but in the wards. The students are taught to take the histories of the cases, and the chief carefully goes over each case, pointing out characteristics and peculiarities, and directing the examinations which each

student makes for himself. My attention has been directed chiefly to neurology, for which London offers special advantages, both in the amount of material and the eminent specialists. At the National Hospital for Paralysis and Epilepsy, there are from 250 to 300 beds, and very large out-patient departments. It is the centre for this special work, and is admirably fitted to carry it on. Dr. Gowers, whose recent book is in most respects the best systematic work on nervous diseases that has appeared, holds a very large out-patient clinic every Monday at the National, and his well-earned reputation has attracted students of nearly all nationalities to him. This clinic lasts from two to three hours, in the course of which almost the whole field of neurology is illustrated. The work is mostly diagnostic and physiological; treatment has not a very prominent place, except an outline of it, nor is pathology made as much of as in many of the clinics in America. This fact has impressed me also in the clinics in general medicine. One does not hear very much about pathology, except in the lecture on that special subject, or in the dead house. The clinical teaching is essentially diagnostic. Dr. Ferrier, whose researches on localization have been epoch-making in the history of neurology, is also at the National. Through his kindness I have been able to see a great many rare cases. Yesterday he showed me a case which is unique—paralysis with atrophy of the *erector spinæ* muscles, with no affection of other muscles of the body. The case has improved greatly under electrical treatment. Also an interesting case of *tabes*, in which there had been absence of knee-jerk for a long period, with reappearance of it on one side after a slight hemiplegia. Dr. Hughlings Jackson is one of the visiting physicians to the National, and also to the London Hospital, with its 800 beds. The great amount of clinical material in the London hospitals seems almost an *embarras de richesse.*

I saw at the National the other day a case of Dr. Gowers, in which Mr. Victor Horsley had successfully removed a tumor from the spinal cord. The patient had perfectly recovered, and the report of the case before the Royal Medical and Chirurgical Society produced a profound sensation. Mr. Horsley kindly showed me his instruments, of which, by the way, there are very few special ones, and photographs of the cases upon which he has operated for brain tumor, abscess, and the like. The success of this brilliant operator is truly wonderful, his cases mounting up to a large number, with scarcely a bad result, so far as the operation was concerned, and many astonishing recoveries. I visited the other day the Brnm Institute, where Mr. Horsley, who is the Professor Superintendent, and his assistants have been carrying on various kinds of experimental work, especially researches in cortical localization, a paper on which latter subject, contributed by Mr. Horsley and Dr. Beevor, I heard read before the last meeting of the Royal Society. I was somewhat disappointed at the meeting I attended of this august and exclusive body. They convened at four o'clock in the afternoon, and after a cup of tea, without which apparently nothing is ever done in England, went into the very fine hall of the Society. There were not more than twenty members present, the papers were all printed; most of them read by the secretary, and there were no discussions. Of course, as the work submitted is always original, the discussions are usually somewhat restricted to certain men. Hospital Saturday and Sunday are made much of here, and for good reason, as a large number of the hospitals are entirely dependent on voluntary subscriptions for their support. There is nothing specially noteworthy in the construction of the hospitals of London. Many of them are old and somewhat inconveniently arranged, and one is struck rather by their number than the size of any individual institution.

American readers will be sorry to learn that Dr. Fothergill is considered hopelessly ill, and the notice of his death will probably reach you before this letter. London is at its best just now, with the usual exception of the weather, which one gets accustomed to after a few weeks. A great many Baltimoreans are here this year, and one meets acquaintances in the

most unexpected manner, showing that the world is nothing like as large as it is supposed to be.

With best wishes for the health of the JOURNAL and its readers, I am,

Very truly yours,

GEO. J. PRESTON.

TRANSPLANTATION OF THE CORNEA.

To the Editor of the Maryland Medical Journal,

DEAR SIR:—

The notoriety given both operations performed by Dr. Chisolm and myself on "Transplantation of the Cornea" by the daily press is well known. I have refrained from giving any consideration or paying any attention to the accusations against me for seeking "fame" through the daily papers as long as those accusations were not made in print. In your editorial column of June 30th you charge both Dr. Chisolm and myself with sending reports of these operations to the newspapers. The accusation is unjust. Dr. Chisolm's long and honorable career as a distinguished surgeon, still later as a teacher of ophthalmology in a famous medical college—at the head of one of the most thoroughly appreciated eye hospitals—proves what his record has been and is to-day; certainly he would not now find it necessary to seek fame through the secular press. When I learned that Prof. VonHipple had succeeded in engrafting the cornea of the rabbit on the eye of the human subject and successfully restored vision, I concluded to visit Giessen, study the details of the operation and learn its technique, which I did and described it in the *Medical and Surgical Reporter* Oct. 11, 1887. Upon my return home Prof. Von Hipple's Trephine was shown to many of my professional friends and at the first opportunity in the presence of ten physicians, several being Ophthalmic Surgeons, the first operation of this kind in this country performed. An event of this kind was not only freely discussed by my immediate circle of friends but by the layety. The newspapers constantly on the *qui vive* for news learned of the proposed operation. This information coming to me caused its postponement for several weeks, and when at last it was performed none but physicians were present. In the newspaper reports I was given credit for performing details which were not done. As to my furnishing the press with a detailed account of the operation or that it was furnished by another with my previous knowledge I emphatically deny. My article which had appeared in the *Medical and Surgical Reporter* was the one from which the report was woven. Very respectfully,

L. WEBSTER FOX.

Phila., July 2.

GOUTY PERIPHERAL NEURITIS.—In an interesting account of a case of peripheral gouty neuritis, in the *Bristol Medico-Chirurgical Journal*, March, 1888, Mr. F. W. Jollye gives the following symptoms as being in favor of his diagnosis of peripheral neuritis:

1. The pain remained limited to one side for some time before suddenly appearing on the other. 2. The lightning-like pains in the extremities, and the "pins and needles" in the fingers and toes. 3. The marked tenderness of several nerve-trunks. 4. The hyperæsthesia and wasting of the muscles of the extremities, accompanied by the R. D. 5. The vasamotor disturbances. 6. The paralysis beginning in extensors and spreading towards the trunk, and afterwards affecting to a slighter extent the hands and arms. 7. The decided intermissions of pain which the patient frequently enjoyed during the earlier stages of the disease. 8. The relief from pain during the attack of gout. 9. The retention of urine coming on as a very late symptom. 10. No affection of the mental faculties. 11. Absence of bedsores.—*Med. and Surg. Reporter.*

MUCOUS PATCHES.—A solution of chromic acid is perhaps the best application to mucous patches, especially to those in the mouth and the pharynx. Use from two to five grains to the ounce. —*Med. Times.*

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BALTIMORE, JULY 14TH, 1888.

Editorial.

ORIGINAL WORK AT THE THOMAS WILSON SANITARIUM.—The noble work of this Insitution among the children of the poor has been resumed during the present summer with renewed vigor. As many as ninety sick children, most of them ill with Summer Complaint, are taken early each morning, free of charge, to the Sanitarium, and brought back to the city late in the afternoon. At the Sanitarium simple food is provided freely for all, and the mothers and children spend the day in its pleasant halls and grounds. Those who go for the day, only, take with them their own medicines, and special caution is used that the directions of their family physicians shall not, except in emergency, be interfered with.

The subject of greatest interest is the treatment of those children who are allowed to remain for several days or weeks in the cottages, under the care of the Physician in charge, Dr. Booker, and of the Resident Lady Physicians. Two of these cottages contain twelve rooms, each with a bed and a cot, for mothers who can remain with their children; the third has a nursery of eight cots, in which children may be left, in charge of two competent nurses, by mothers who must go to the city and who are furnished with tickets so that they may return to the Sanitarium whenever they wish.

Severe cases of Summer Complaint are benefitted only by several days stay in the country.

The treatment of the cottage children is very simple and worthy of adoption in private practice. In acute diarrhœa with vomiting of milk, the child is at once taken from the breast or bottle, and no food except beef tea is given to it for 24 hours. Small doses of Calomel—1-12 to 1-6 grain—are administered hourly for a day or two, to quiet the stomach and to excite the secretion of the liver. At the end of 24 hours *sterilized milk* is given. If the vomiting returns the milk is stopped and beef tea is resumed for 24 hours, when milk is once more given.

No artificial foods are used in the Sanitarium. Irrigation of the lower bowel is practiced 2 or 3 times a day, if it does good. In chronic cases Resorcin grs ij with Tr Opii Deodorata gtt ½ is given every 2 or 4 hours. When vomiting proceeds from nervousness, Sodii Bromidi grs.ij and Chloral Hydrate gr. j are administered every 2 or 4 hours to a child of 6 months. This same prescription is used for sleeplessness. As a rule no further medication is needed.

Dr. Brooker considers the *sterilization of the milk* a great improvement, likely to do away with wet-nursing and artificial foods. Milk as it flows from the breast is free from microscopic germs. Between the time when the cow's milk leaves the rubber and the time when the baby drinks it various minute organisms may fall into it, which, either before or after the child takes it, produce changes in the milk which cause disorder of the digestive organs of the child.

By *sterilization* we either destroy these organisms or check their growth. The apparatus for sterilization is a covered tin bucket 10 inches in height by 8 in diameter and a wire basket, made by Dufur & Co., of Baltimore, large enough to hold 6 or 8 nursing bottles. In the bucket, filled to the depth of 1 inch with hydrant water, is placed the wire basket with the nursing

bottles, each of them containing a suitable amount of milk and stopped with a wad of cotton batting. The bucket is then covered and placed on a gas stove, and the water is boiled for half an hour, the milk, bottles and stoppers becoming sterilized by the heat. After cooling the basket of bottles is kept in a cool place, and one by one, as needed, the bottles are removed, the stoppers taken out, and a disinfected nipple is attached for nursing. Milk enough to supply one baby for 12 hours is thus prepared at once and if kept in a cool place—even without ice—it will remain sweet and wholesome until used. The whole apparatus, including bottles, costs a little more than a dollar.

It is stated by Dr. Brooker that when the infant's bowels have once been cleared of ill-digested milk by change to beef tea and by irrigation, the use of sterilized cow's milk properly diluted is followed immediately by great improvement in the health of the infant, as great as when it returns to the breast of its mother.

For irrigation of the bowels a fountain syringe full of tepid hydrant water is connected with a soft rubber catheter about 14 inches long, and this catheter, oiled, is passed gently to its full length into the rectum and descending color, the water—a gallon or more—being allowed to follow into the bowel and out again by the side of the catheter. This irrigation is painless and often aids greatly in recovery, especially in severe cases resembling cholera infantum.

Higher Medical Education.—A growing professional sentiment in favor of a higher medical education is beginning to manifest itself in a number of ways and those friends of medical reform who have laboriously advocated an improvement in the educational curriculum of the medical student can congratulate themselves on the progress which has been made recently. Those institutions supported by endowments, such as the University of Pennsylvania, Harvard University and the Johns Hopkins University, have been in a position to require lengthy terms and high requirements, but this condition of things has not existed with those schools which were dependent entirely upon students' fees for their support. Probably on this account less was expected of such institutions than should have been the case. At any rate those schools which have educated the great majority of the medical profession of this country have exacted less of their students than the status of the times warranted. It is therefore gratifying to notice that such schools as the Jefferson Medical College of Philadelphia, and the College of Physicians and Surgeons of New York have finally committed themselves to a curriculum of three obligatory winter sessions. It is now hoped that other prominent medical colleges throughout the country will see the importance of adopting this plan. Indeed, we should be glad to see a profressional sentiment enforce this rule by giving its support to those schools which have had the courage to face a possible financial loss in view of a higher course of training for their students. We cannot but think that any temporary reduction in students' fees following a lengthening of the curriculum will be more than compensated for in the long run by a gain in prestige and respectibility. The time has now come when all schools claiming to hold a position in the front rank will be compelled to adopt the three years' course and only "second class" institutions can afford to hold on to the present curriculum of two winter sessions. The profession will doubtless place this estimate upon the respective standing of medical institutions of learning. We shall be glad to see the medical colleges of this city following the example of the Jefferson and College of Physicians and Surgeons of New York.

Flooding.—(Montgomery). A woman of twenty-eight complains of flooding for three weeks. Examination shows that the uterus is about as large as that of a three months' pregnancy; but it does not feel like a pregnant uterus, nor do the other conditions favor this view. The probabilities are that we have here a soft growth in the cavity of the uterus. Although she says that she has not had a chance to become pregnant since last November, we will not take the risk of inserting a sound into the uterus till we have had the woman under further observation. Meanwhile she will be given this prescription for the flooding:

℞ Ext. cannabis indicæ, gr. viij
Ext. ergotæ fluidi, ʒj
Ext. hamamelis fluidi, ʒss
Tinct. cinnamomi, ʒss

M. Sig.—Teaspoonful three times a day.

Ergot would not be contra-indicated even if we knew her to be pregnant. Injections of hot water will also be given. As soon as we are quite sure that there is no pregnancy the os will be dilated with a tent wide enough to introduce a finger; and then a positive diagnosis can be made.—*Med. Times.*

The Treatment of Flatulent Dyspepsia.—Pepper, in a recent clinical lecture, stated that flatulence may result from the excessive formation of gas. Under these circumstances, such remedies as sulphurous acid, which a powerful antiseptic, will be found useful. It may be given alone or combined with small doses of strychnia. He prescribed as follows:

℞ Acidi sulphurosi, ʒiss vel ʒij
Strych. sulph, gr. ss.
Tr. card. comp. ʒss.
Aquæ, ad ʒiv.

Sig.—One drachm after meals, in water.

You may resort to a different class of remedies and give creasote. This is a local stimulant to the stomach, and in atonic cases is of service. It is at the same time a powerful antiseptic and antifermentative agent. Creasote is best given one-half or one hour after meals, when the process of fermentation is about beginning. At this time the gastric digestion should have passed through the acid stage, and the contents of the stomach should be neutral or alkaline. Given at this time, the creasote may be advantageously combined with an alkali, as sodium bicarbonate.

℞ Creasote, gtt. x.
Sodii bicarb. ʒij.
Pulv. acaciæ, q. s.
Aquæ, ʒij.

Sig.—Two drachms one hour after meals.

In place of the sodium bicarbonate in the above formula the subnitrate of bismuth may be employed.

If it is recognized that there is not only a state of atony with a tendency to fermentation, but that there is also a deficiency of gastric power, pepsin, or ingluvin may be given. Pepsin is best taken in acid mixtures, and should be given at the acid stage of the digestion. At the same time, if the administration of the drug is postponed for a short time after meals, it comes at a time when the power of the gastric juice is about exhausted.

℞ Pepsin, fort. ʒj,
Creasot. gtt. x.
Bis. sub. carb. ʒijss.—M.
Et ft. pulv. No. xxx.

One of these powders, in a small gelatine capsule, can be given one hour after each meal.

Ingluvin is a powerful digestive agent, and may be substituted for the pepsin. I have found it of service in cases where pepsin does not work well, and I should be disposed to say, where the mucous membrane of the stomach is decidedly irritable.

Again, in this same line of thought, we have agents, like powdered charcoal,

which act as absorbents of the gases, and are, at the same time, anti-putrefactive and anti-fermentative in their action. Powdered charcoal, with soda or bismuth, may be given a couple of hours after meals, and in the class of cases of which I have been speaking, may afford a great deal of temporary relief. When charcoal is given, the patient should be informed that it will cause blackening of the stools.—*The Polyclinic*, May, 1888.

Irregular Heart Action.—Prof. Bowditch says that he found the following formula of great service in relieving even the most serious cardiac affections:

R.—Pulv. digitalis . . gr. x.
Pulv. colchici . . gr. xx.
Sodii bicarbonatis . gr. xxx.
M.—Et. div. pil. No. 20.

These are to be taken three or four times daily at first; subsequently to be reduced until only one is taken at bedtime, the treatment to be continued for three to nine months.—*Hospital Gazette.*

The Treatment of Spermatorrhœa with Electricity.—The treatment of spermatorrhœa with electricity is largely adopted on the Continent, and generally considered to be most efficacious. Opinion is, however, divided as to whether the galvanic or faradic current is most valuable, and whether the form of treatment should differ in different types of the disease. Richard Wagner, of Blankenburg, says the *Medicinisch-Chirurgische Rundschau* of February, 1888, tells of ten cases of spermatorrhœa in which he has used electricity. Three of these were not at all improved by the treatment. He is of the opinion that the faradic current is of special value in cases where the spermatorrhœa has resulted from sexual excesses, especially onanism, and when there exist a general excitable state of weakness. In such cases Wagner considers a local application of the current to be contraindicated, as it is not a question of treating local irritation so much as general over-excitability of the whole nervous system.

In cases where inflammation of the prostate or ejaculatory glands exists,—viz., from gonorrhœal origin,—a local application of the current is the only means by which satisfactory results can be obtained.

The anode (+) should be placed on the lumber vertebræ, the cathode (—) at the base of the organ, at the symphysis or perineum.

The electric treatment should in all cases be an accompanying one, as without constitutional treatment but little improvement can be looked for.—*Ther. Gazette.*

Acute Peritonitis Successfully Treated with Saline Purgatives.—At the meeting of the Midland Medical Society, March 21, 1888, Dr. Suckling (*Lancet*, May, 1888) showed a man, aged 21, who was admitted into the workhouse infirmary on January 6, suffering from acute peritonitis. Three days before admission he was attacked with vomiting and pain in the abdomen; there was constipation. The abdomen was tense and tympanitic, and the abdominal respiratory movements were abolished. There was extreme tenderness above the abdomen; the legs were drawn up; the pulse small and frequent; the expression anxious. He had retention of urine and fever. No tumor could be detected in the iliac fossa; vomiting was incessant, and pain about the umbilicus greatly complained of. Dr. Suckling thought that the peritonitis was set up by typhlitis, due to fecal retention. Opium and belladonna were first given, but the vomiting and pain continued. Then ½-drachm doses of sulphate of magnesium and sulphate of sodium, with 10 minims of tincture of belladonna, were given every four hours. Improvement soon followed this treatment, several liquid motions being passed. On January 9 the vomiting, pain and tympanites had passed off, and a distinct fulness could be observed, with increased resistance to pressure in the right iliac fossa. The medicine was continued, with the result that the motions became more and more solid till the 14th. He continued to complain of dragging pain in the abdomen for some time; but in

about three weeks after his admission was allowed solid food. He has since had two or three slight relapses, which at once yielded to purgatives and proper dieting; and at the present time there is a distinct indurated swelling in the right iliac fossa. Dr. Suckling was of opinion that in this form of peritonitis, and in typhlitis due to fecal retention, saline purgatives in moderate doses and with plenty of water were of great value. —*Ther. Gazette.*

A Study of the Micro-Organisms in the Stomach and Intestines in the Summer Diarrhœa of Infants.—Dr. W. D. Booker, of this city, read a paper on the above subject before the New York Academy of Medicine. He said that it had been found that in the fæces of all milk-fed infants in health there were constantly present, and in large numbers, two species of bacteria; namely, the *bacterium lactis arogenes* and the *bacterium coli commune.* They were diagnosed as the obligatory milk fæces bacteria, as distinguished from the inconstant bacteria which were found under various circumstances. These were ærobic for the most part, and, as a rule, were somewhat more numerous in the fæces of infants fed on cow's milk than in the fæces of sucklings.

When diarrhœal disease was present, a number of new species of bacteria appeared in the stools, and in a paper which he had read before the Section of Diseases of Children of the Ninth International Medical Congress, Dr. Booker said he had described eighteen varieties which he had observed in the fæces of seventeen children, some of whom were suffering from catarrhal diarrhœa, while one was in good health. During the past winter he had investigated the fæces of two additional cases of catarrhal diarrhœa, and he had now to state that he had separated no less than twenty-three varieties of bacteria from the dejecta of nineteen children suffering, with one exception, from diarrhœal disease. Many of the varieties, however, bore a close resemblance to each other, both morphologically and biologically. The fæces of two of the children who had cholera infantum each contained eight varieties.

Having described the microscopical changes and the changes in color produced by the introduction of the various bacteria in pure milk and milk mixed with small and large quantities of bile, Dr. Booker stated that none of the varieties produced diarrhœa in animals, whether introduced into the system by the mouth or rectum, or by intra-venous injection.—*Boston Med. and Sur. Jour.*

Tape Worms.—Gerhard has used Schaflint's remedy for tape worm—in every case with complete success:

℞ Granati cortici radicis, ʒss.
Seminorum peponis, ʒj
Pulveris ergotæ, ʒj.
Fiat infusion.

℞ Extracti filicis maris ætherici, fʒj.
Olei tiglii, ♏ij.
Pulveris acaciæ. ʒij.
Fiat emulsio.

Mix the emulsion with the infusion for one dose, to be given at ten o'clock in the morning, having eaten no breakfast, and having taken a full dose of Rochelle salts the previous evening. In every instance but one the parasite was expelled alive, in about two hours after taking the medicine. One singular peculiarity is the fact that the worm is nearly always voided entire, with its head fastened to the side of its own body, which very much facilitates the finding of that very important portion of the animal.—*Med. Times.*

Treatment of Green Diarrhœa in Infants.—Green diarrhœa in infants has for some time past been successfully treated with lactic acid, but recently there have been many reports of failures with the remedy. As pointed out by M. Hayem (*Fortschritte der Medizin*), the dose employed in these reported cases was too low. To be efficient the two per cent. solution of lactic acid usually employed should be repeated every half-hour during the day. The infant should get not less than 15 or 20 teaspoonfuls of the remedy in the twenty-four hours. When thus used it is almost specific in its action.—*National Druggist* May 1, 1888.

Medical Items.

The Jay Gould Medical College has been recently organized in Memphis, Tenn.

Dr. A. H. Powell, of this city, left during the present week for a tour through Europe.

The owners of the London *Lancet* have been offered $400,000 for the journal, and have refused the offer.

The American Rhinological Association will hold its sixth annual meeting at Cincinnati, Ohio, September 12, 13 and 14, 1888.

The late Dr. Rachel L. Bodley, Dean of the Woman's Medical College, of Philadelphia, willed her scientific books to that school.

By a will lately made the Boston Medical Library Association will receive a bequest of $10,000 at some future time.

In honor of his sixtieth year of practice, Dr. Hiram Corson, of Conshohocken, was tendered a reception in the Bellevue Hotel, Philadelphia, June 8th, 1888. The doctor is in his eighty-fourth year, and is the oldest living graduate in medicine of the University of Pennsylvania.—*Med. and Sur. Rep.*

A Medical Club has been established in St. Petersburg, the objects of which are purely social. Any physician in good standing is eligible to membership, the only dues being the payment of two roubles each evening of meeting. The entertainment consists of music, dancing, card-playing and tea-drinking. It is hoped shortly to secure a club-house, and then a permanent organization will be effected.—*Med. Record.*

Dr. Wm. A. Hammond, the justly distinguished specialist, has in preparation a very fine and beautiful Sanitarium in the neighborhood of Washington. In this building he will have accommodations for thirty invalids who will of course belong only to the class of nervous sufferers. There can be no question of the success of this enterprise for Dr. Hammond's ability and enthusiasm would render successful any undertaking whatever. The Sanitarium will be ready for occupation in November.—*Gaillard's Med. Journal.*

Dr. Batour ("Jour. des. sci. méd. de Lille" ; "Lyon méd.") states that he has accidentally discovered the virtues of common salt in the treatment of migraine. As soon as the first symptoms of an attack are perceived, half a spoonful or a spoonful [whether a teaspoonful or a tablespoonful, is not stated] should be swallowed dry, and then a mouthful of water. Generally the threatened attack is aborted or much shortened. Six cases are reported, all successful. The author attributes the effect to reflex action.—*New York Medical Journal.*

On the 28th of June, Mr. D. O. Mills formally transferred to the city of New York the new training school for male nurses which he has erected at his own expense in the grounds of Bellevue Hospital. The building, which is of Carlisle stone and red brick, with terra cotta trimmings, is in the form of an L, five stories and a basement in height, and has a frontage of 75 feet on Twenty-sixth Street, and 80 feet on the East River. The two upper floors are to be devoted to the hospital museum. The total cost of the building as completely equipped and furnished by Mr. Mills was about $100,000.

Mint as an Anæsthetic.—Peppermint water, the last new antiseptic, is said to be, like carbolic acid itself, a useful agent for producing anæsthesia, or, at any rate, diminishing hyper or dys-æsthesia of the unbroken skin. Dr. Armand Routh reports very favorably on its use in pruritus pudendi, especially in the neurosal form observed frequently during pregnancy, or at the climacteric. He orders a teaspoonful of borax and five drops of ol. menth. pip. to be put into a pint bottle of hot water, and well shaken, the parts affected to be freely bathed with a soft sponge. The soothing effect often lasts for many hours.—*Philadelphia Medical Times.*

Modern electrical science, in developing electrical lights and electric motors has also brought for consideration new problems in regard to the safety of human life. The electric arc lamps are supplied by currents of one or two thousand volts, and these are dangerous to life. It seems that in order to use milder currents which are effective, larger and more expensive cables are necessary. Hence it is, to some extent, the greed of money which makes electric lights dangerous. Very much the same thing can be said, probably, of electric motors. The cars run by storage batteries cannot be considered as at all dangerous.—*Med. Record.*

Dr. A. Y. P. Garnett, a well-known physician, of Washington city, died at Rehoboth Beach, Del., July 11th, of heart failure. He had been severely ill for several days, and was believed to be slowly convalescing. He left Washington for the sea shore July 11th, for the purpose of recruiting his failing health. He was born in Virginia in 1820, was graduated in medicine at the University of Pennsylvania in 1841, entered the United States navy as assistant-surgeon the same year, was promoted surgeon in 1848, and resigned in 1850 in order to accept the professorship of clinical medicine in the National Medicine College of Washington. He married the eldest daughter of Henry A. Wise. At the breaking out of the war he left Washington and became surgeon-general of the Confederate army. He was the family physician of Jefferson Davis and of all his cabinet officers, and accompanied Mr. Davis after the evacuation of Richmond. At the close of the war he returned to Washington, and was again elected a professor in the medical college. Recently he was president of the American Medical Association.

Original Articles.

CUT THROAT.*

BY RANDOLPH WINSLOW, M.D.,
BALTIMORE, MD.

Professor of Surgery in the Woman's Medical College of Baltimore, etc.

The remarks which I shall make this evening, on Cut Throat, are instigated by a desire to learn rather than to teach, as my personal experience is small in this connection. It seems to me, however, that the subject is of sufficient importance to be brought to the notice of this Society. By the term cut throat I mean those wounds of the neck usually more or less transverse in direction which are generally inflicted with suicidal intent, though, of course, they may be received in other ways. I have had, fortunately, to deal with but two such cases, one a slight injury from which the man made a quick recovery, the other a severe and dangerous lesion which came but little short of being fatal.

Case I. Benjamin Franklin, colored, whilst in a condition of frenzy, attempted suicide by cutting his throat with a razor. The incision was at the upper border of the thyroid cartilage, but did not injure any important blood vessels or open the air passages. The wound was sutured and dressed antiseptically, and the patient left hospital in a few days.

This simply illustrates one or two points of some interest and importance; first the location of the wound at the top of the larynx or between the hyoid bone and larynx, which is the seat of election, so to speak, for these suicidal wounds—80 out of 232 cases collected by Mr. Durham having been through the thyrohyoid membrane. Secondly, the fact that a large number of these attempts fail to inflict more than a superficial lesion, owing probably to the reflex contraction of the cervical muscles which thereby draws the neck away from the knife.

Case II. G. D., aged 26 years, catholic, suffering with religious melancholia, was seen by me in consultation with Dr. Henry F. Hill, in Oct. 1887. His melancholic symptoms had been in existence for some time but he had never attempted self-destruction previously. On October 11th, 1887, he cut his throat with a razor, the incision being almost transverse in direction, long, irregular and ragged severing the cricoid cartilage freely. A large quantity of blood was lost from the anterior jugular veins, but no large vessels were injured. The larynx was almost severed but the pharynx was not injured. The incision was more extensive on the left than upon the right side, which is usually the case with those who use the right hand for holding the razor. The patient was pale, ghastly in appearance, and in a condition of collapse, the breath whistled in and out of the cut wind pipe, and bloody serum and mucus exuded from the wound. The external wound was partly sutured, but the incision into larynx was left open. There was considerable cough, and much secretion from the trachea for some days. After a few days the larynx was loosely sutured so as to leave an exit for the discharges. The wound was dusted with iodoform and a piece of gauze moistened with carbolized solution was kept over it. At first the injury seemed to improve the mental calibre of the patient but subsequently he became so maniacal and dangerous that it became necessary to commit him to Mount Hope. During the time in which he was under my observation there was but little fever and no pneumonia or other lung trouble supervened. The wound healed with marvelous rapidity, but he tore it open again during one of his spells. He ultimately recovered, but I am ignorant of his present condition, both as regards the after effects of the wound and his mind.

There is fashion in suicide as well as in dress, and in some countries it is fashionable to attempt self-destruction by cutting the throat as narrated in the above mentioned cases; in other countries other modes of terminating one's own life are preferred; thus in England the suicides by cut throat are about 1 in 5, whilst in France they are about 1 in 38. Whilst I do not know the propor-

*Read before the Clinical Society of Maryland.

tion of suicides by this method in the United States, it is undoubtedly high. The razor is the implement most frequently used for this purpose, and as it is usually held in the right hand the incision is generally more extensive on the left side than upon the right, the incision running somewhat downward or quite transversely. Whilst superficial wounds of the antero-lateral aspect of the neck are not devoid of danger, the gravity of the injury is much enhanced by the opening of the air and food passages. Mr. Durham in Holmes' System of Surgery, 3d edit., has collected 232 cases of cut throat and finds that the wound was above the hyoid bone in 17, through the thyro-hyoid membrane in 80, through the thyroid cartilage in 42, through the crico-thyroid membrane in 36 and into the trachea 57. In all wounds of this portion of the neck there is free hemorrhage, but as a rule the deep vessels escape injury. This immunity from injury of the great vessels of the neck is largely due to the projection of the larynx, which, when the head is thrown backwards, is rendered more prominent than usual, and the force of the incision is expended upon this organ; nevertheless the first and greatest danger in these cases is hemorrhage. Not only is hemorrhage sometimes fatal from the quantity of blood which is lost, but another danger which is far from uncommon, is that of the entrance of blood into the trachea thereby producing suffocation, when the quantity of it is large. Another accident to be feared is the entrance of air into the veins during inspiration; whilst this is especially liable to occur if the larger vessels have been cut, it may result from the wounding of smaller veins also. When the incision is above the hyoid bone, the anterior attachments of the tongue may be severed, and the tongue may then fall back over the epiglottis and produce speedy death. This may be prevented by seizing the tongue and drawing it forward. When the incision is between the hyoid bone and thyroid cartilage the pharynx is opened and the epiglottis may become detached and fall into the larynx, thereby producing suffocation, or detached fragments of the cartilages may get into the air passages, and when the pharynx or œsophagus is opened portions of food may enter the air passages and produce alarming symptoms. Emphysema is a not uncommon but usually not dangerous complication. There are a number of other immediate dangers, as œdema of the glottis and larynx, purulent infiltration and abscess of the neck, bronchitis and broncho-pneumonia, besides remote accidents, due to exhuberant granulations-contraction of the new tissue around the air passages, producing stenosis, and permanent loss of voice.

I have attempted briefly to portray the most characteristic results of these wounds of the neck; it now remains to consider their treatment. If the air passages have not been opened, and the large vessels are uninjured, the indications for treatment do not differ from those of any other superficial wound, viz. the arrest of bleeding, the antiseptic treatment of the wound, and suturing of the incision. When the jugulars or carotids have been severed, the patient will usually bleed to death before any succor can be obtained, but if seen sufficiently early the finger should be at once placed upon the bleeding vessel until it can be secured by a forceps and ligatured. If the internal jugular vein is but slightly injured, an antiseptic cat gut ligature may be placed laterally upon the cut point, but if a considerable portion of the wall of the vein has been severed, it should be ligated above and below the wound. Of course nothing but ligation or torsion of the carotid arteries will afford any security when these vessels have been wounded. The entrance of air may be prevented to some extent by direct pressure if the case if seen sufficiently early, or the wound may be filled with water, which will protect the open vessels. One of the most urgent indications for treatment is that of threatened suffocation. This may be from the entrance of blood into the air passages, and must be met by the dislodgement of the clots from the larynx or pharynx with the finger r probang, and when the trachea is filled with blood, by sucking it out with a

syringe or the mouth, the patient being inverted if liquid blood is in the air tube; unfortunately the patient usually dies before the surgeon can apply any remedy. Suffocation from a wounded epiglotis, should be prevented by removing the entire detached portion of the cartilage, as it is not safe to trust to sutures to hold this very movable organ in position. When the anterior attachments of the tongue have been severed, the tongue should be secured to the hyoid bone by silver sutures. Having attended to the immediate indications which have been mentioned above, the treatment of the wound will next engage our attention, (and this is the point to which I especially desire to call attention, and to ask for an expression of opinion.) When the wound of the soft tissues is much more extensive than that of the air passages, there can be no objection to partially suturing the wound. If muscles have been severed, these should be reunited with aseptic cat-gut sutures. Authorities differ in regard to the treatment of the laryngeal or tracheal wound, the weight of authority being against the use of sutures until all danger from hemôrrhage, emphysema and inflammatory ordema has passed off. Gross is quite strong in favor of suturing the cartilages within 5 or 6 hours, as it steadies the larynx and prevents displacement and allows of less contraction than when it is not done. Most authors recommend the approximation of the cut surfaces by means of position, the head being flexed upon the neck and retained in this position by means of bandages; since they consider it almost impossible to obtain immediate union, owing to the constant movement of larynx, and the discharge of mucus. It has also been suggested to introduce a tracheal cannula and suture the wound. This thought also occurred to me whilst considering the treatment of case II. I certainly do not see any adequate reason for not closing the tracheal wound, provided a sufficient opening is left for the escape of discharges. If the pharynx or œsophagus is severed partially or entirely I believe the wound should be accurately sutured, if for no other purpose in order to prevent the entrance of saliva into the wind pipe, as well as to facilitate the swallowing of food. In suturing the larynx it is recommended by many to pass the sutures only through the loose connective tissue surrounding this structure. Bryant, however, says the stitches should include the whole thickness of the tissues. Careful nursing and attention should be given to all patients with cut throats, and it is often necessary to place them in straight jackets to prevent interference with the wound, as well as renewed suicidal attempts. The atmosphere of the room should be warm and moist as after a tracheotomy, and the wound should be covered with gauze moistened with carbolic solutions. When the pharynx is injured swallowing must be prohibited, and food is to be given through a tube passing from the mouth to a point below the seat of injury, every care being taken to prevent the accidental passage of food into the larynx or trachea. Sometimes nutritive enemata must be employed.

As a remote sequel of this class of injuries strictures of the air tube may occur, and can only be treated by tracheotomy, with subsequent dilatation of the constriction. Fistulæ may also occur and require plastic operations for their cure.

Emphysema is sometimes a severe complication, but it rarely requires treatment. If it threatens to interfere with respiration, incisions should be made to allow the escape of the air. I have thus sketched very superficially the main considerations in regard to cut throat, and leave it to those whose opportunities have been much greater to supplement my deficiencies and to correct my inaccuracies.

The Treatment of Chronic Ulcers. —Dr. Bitot, writing in the *Journal de Médecine de Bordeaux*, of March 18th, 1888, speaks enthusiastically of the use of water-bags in the treatment of ulcers. He reports some cases of eczematous ulcers, which had resisted all modes of treatment, but healed readily under even pressure applied by means of small rubber bags partially filled with water, —*Medical Record.*

POSITIVE MEDICINE.*

BY J. R. UHLER, M.D., OF BALTIMORE.

The subject I have chosen is Positive Medicine. What is meant by that term? Is there any such thing as Positive Medicine? and if so, what is its scope? These, and many other questions, require consideration; but for the present it will only be necessary to say that Positive Medicine is that which *we are certain of, positive about, and that will stand the closest scrutiny.* It includes all the *truths* imparted during the medical curriculum, embracing the *known facts* of anatomy, physiology, surgery, obstetrics, practice, chemistry, physics, therapeutics, and hygiene, so far as they relate to the healing art. From feeble beginnings it has grown to importance, and now lies scattered through many tomes and the brains of the world. You know a little of it, and so do I, but what *it needs* is some "Gradgrind" of the profession, with patient industry, to systematize and develop it, as he incessantly searches for *nothing but facts.* In this paper I desire to emphasize some of these facts, to make the way plain for this coming man, so that out of feeble endeavors there may come forth some good. "Life is short," and as men become older they get tired of screening a mass of chaff for one kernel of truth. The medical profession is in *great need* of a *compiler* and *condenser*, *one* who will *extract* the *honey for them* in a *few well chosen words.* Writers could help him, if they would only have *their new ideas or facts printed* in a *different kind of type* from *the padding or rest of the article*, but I am afraid when they came to look over it for this purpose the majority would find so little originality, they would cease writing for very shame. It is a *great thing*, *when writing*, *to be positive*, *well provided with facts*, and *to be able to say "I know;"* but it is *greater to be able to prove these facts mathematically* for the satisfaction of others. In geometry and some other branches we have what are called *axioms*, or *self-evident truths*, things that cannot be made plainer by any demonstration. So also in medicine there are *facts* evident to all. For instance, we *know* that *people all die;* that they *do not live a thousand years;* that *all sick of a certain disease do not perish from that disease*, and that *many drugs have certain effects.* All this is a matter of *daily observation*, not of your observation or mine, but *one of universal experience*, where *all agree.* The number of such facts may be great or small, but whatever their sum they belong to *Positive Medicine.* Let us examine some of these facts in detail and see what will be the outcome and what is the *degree of certainty in medicine.* Some say medicine is an art, others a science, but we think it both, and if there are any laws of health and disease, then all must admit it. Practically we do so by the formation of boards of health, etc.; and so trusting do we become that *they* are given *very arbitrary power.* Whether this is wise or not I do not propose at present to discuss, but shall proceed to my subject by assuming all the *assertions* of *medicine as a whole* to be an *unknown quantity* $\times$, which for convenience, (since there are nine branches) we will call 9, or $\frac{216}{24}$, and by asking if there is anything *positive* or *certain in anatomy?* You look astonished and say, why the *whole* of *gross anatomy is certain;* it is the very *groundwork* of our profession. Then let us put down on the blackboard that some thousand or more *assertions* in *anatomy are all true*, that is to say the *whole* of *one branch* is *positive*, *one part* of $\times$ *ready to be found.* How about chemistry? Is there any *truth* in chemistry? Why the world would not hold together if it were not for chemistry and physics, and our bodies likewise would fall to pieces, *They* are *the most positive* of *all sciences.* We will, therefore, also put down these two branches as certain, and by *calculation*, say $\frac{2}{9}$, or 2 *more parts* of $\times$ *are ready* to be found. By this kind of exclusion and addition, $\frac{3}{9}$ or 3 parts of $\times$ are made certain. But there are other branches that are *not egual to this* $\frac{1}{9}$ *but occupy a lower position.* How will we find them? Take physiology for example! How is it with this branch? A glance shows it to be partly built upon

*Read before the Baltimore Academy of Medicine June 5th, 1888.

general chemistry, and that part, of course, must be true; so also that which is founded on physics. But are we not likely to be deceived by phenomena and reactions that cannot be seen, and, therefore, but imperfectly understood? We certainly are, and on this account, after *summing up all the available facts*, must make allowance, and say that $\frac{2}{3}$ of Physiology is not proven, and, therefore, probably untrue; so for *convenience* we will put down physiology as $\frac{6}{8}$ *true*, $\frac{2}{8}$ *uncertain*, and *this* $\frac{1}{8}$ *of* $\times$ *by so much wanting*. But some may ask where do you get these figures? Are they impressions. or the result of study? Both, and they may not be *absolutely true*, since "*judgment is difficult*," but are *sufficiently so* for our purpose, as they come from *adding up* the generally admitted *facts* in physiology, and comparing them with the whole number of *assertions* found in the text-books of that branch. Besides this they are likely to be changed and improved by sifting and discovery as facts accumulate and time goes by, and that is my object in presenting them for criticism.

In the practice of medicine we have to make such *calculations* as are possible but it is *hard to find out* the *whole number of assertions* in this $\frac{1}{8}$ part of $\times$, and when found *it is still more difficult to sift* the *true* from the *false*. We *are sure*, *however*, we can *combat* many *symptoms*, *certain* we *can cure* an *ague*, *stop* a *pain*, *open* the *bowels*, *cure syphilis*, *conduct* some *self-limiting diseases* to their *termination; positive* we *can cure* the *itch*, *can over-neutralize* an *acid* or *alkali* in the stomach, *break up sarcina* in *vomit*, *can assist nutrition* by helping digestion, *can cure rheumatism*, or, at *least*, *modify it* and *stop* the *pain*, *cure diarrhœa*, *check dysentery*; but in *purely medical cases* we can do little but *ameliorate symptoms*, and *prevent bad complications*, leaving to nature the cure. Take a self-limited disease, typhoid fever for example; we may *reduce the temperature*, *feed the body*, *regulate the bowels*, and perhaps when the abdominal walls are *thin*, *kill or modify the germs* by the *internal* and *external application* of *heat** or antiseptics, and otherwise make the patient comfortable, but the disease generally lasts many weeks in spite of us. Some think we can cure cerebro-spinal meningitis, by bin-iodide of mercury or antipyrin, and we *know* that we *can stop spasmodic croup*, but in medicine proper the number of diseases that can be *cured* is *small—how small* must be *determined* by *statistics*. An examination of one medium-sized practice of medicine *shows* that there are 155 *common medical*, including the *self-limiting diseases*, and *for* 56 *of these* we *can do something*, either in the way of relief or cure, that is *about* $\frac{1}{3}$. Another practice *gives us* 242, with 68 *curable*, *equal to* $\frac{68}{242}$, rather *nearer* $\frac{1}{4}$ *than* $\frac{1}{3}$, not a very flattering exhibit to be sure, and when the largest books are considered it will probably be $\frac{1}{5}$ or less, say $\frac{5}{24}$, and *at this figure* we will *put it down*. A more positive result can only be reached by much labor through the ordinary numerical method, comparing cases of the same kind together, being careful about the diagnosis, prognosis and treatment, and until this is done for every disease all over the world, one of the factors will be by so much deficient.

Materia medica and therapeutics is more exact than I anticipated, for after an *examination of* 324 *remedies* described in our text-books, I *find that* 218 are *known* to frequently *do* their *work*, 116 *are untrustworthy*, and *about* $\frac{1}{3}$ *of the whole*, *or* 108, *are very active*, and this is probably the correct answer to Prof. Bartholow's question of the "Degree of Certainty in Therapeutics." The *drugs* that may be considered *as acting* with *positiveness are chloroform*, *morphia*, *chloral*, *belladonna*, *bi-chloride of mercury*, *etc.*, and are too well known to require repetition. There are probably *more unsupported assertions* in *hygiene* than in most of the other branches, and it must ever be so until more is *known* about the *causes of disease*. One hobby that meets with almost universal acceptance is *dirt as a cause of disease*, and for the sake of appearances, as well as civilization, it is well for the people to believe so, but when we come to *absolutely prove it* there are many difficulties in the way. There are some things,

*See Sternberg's work as to the degree at which the typhoid bacillus is killed, viz. 132.8 Far.

however, that *we do know in hygiene*, and when they are compared with *such as are uncertain*, the proportion will be *about* $\frac{5}{12}$ *of the whole*. Obstetrics is *very certain*, though I cannot agree with all that is *neglected and done*, and therefore will put down *its degree of probability* at $\frac{10}{12}$. Surgery comes *nearer to perfection* than the practice of medicine, and taken all together *equals obstetrics*, which might be considered one of its branches. Of late years it has made gigantic strides, and even within the last month *the diagnosis and treatment of intestinal wounds has been so much improved* that we wonder, with the plumbers all around, *we did not think of it before*. Senn, of Milwaukee, has been *arousing the West* with *his work*, and already the whole world has heard of it. By injecting one or more gallons of hydrogen, under pressure varying from $\frac{1}{2}$ to 2 pounds to the square inch into the rectum, he has been enabled *to light the gas* as it *escapes* from a *tube* coming out of the mouth or wound, and thus *positively proves* whether the parts be perforated or not. It is also *applicable* when *obstruction* of the *bowels* is *suspected*, to *find out if they be permeable*, since the gas can often be *heard* as it *gurgles through* the *intestines*, and if *pressure enough be used*, *it can be forced* out of the mouth. This, if *safe*, is an *admirable plan*, and Prof. Senn *deserves great credit* for *thinking of* and *developing* it, but it *seems to me* that it is *open to the slight objection* that *perfectly pure hydrogen* must be used if we would avoid it *being said* in *medico-legal* cases, when the patient *dies*, that we have helped to *cause death* by the *arsenic* in our *zinc*, or *sulphuric acid forming arsenide of hydrogen*. Besides this it is *troublesome* to seal a tube in a *wound* to *convey hydrogen*, and also *difficult* at times to *prevent* the *gas from being expelled from the rectum* as it is *injected*, and where *more than one wound is present*, unless the gas be escaping in very large quantity, *this also must be closed to prevent its exit at this place* while dealing with the other. *Moreover*, since *hydrogen*, *mingled with a certain proportion of oxygen*, or *air*, is EXPLOSIVE, *risk* will be run if we *are not very careful when* it is *lighted*. It appears to me, therefore, that it would *be less dangerous* and *more simple to dispense* entirely *with the tube* in the *wound*, and *to use a wire frame* with very *small meshes*, like Davy's safety lamp, a *short distance above the wound*, and *light* the *gas as it escapes through this*, or perhaps it *would be better* to *employ a gas*, like *carbonic acid*, with a few drops of peppermint in it, that is *more readily prepared* and *not open* to these *objections*. As is well known to chemists, this *gas*, (when *escaping* from the wound) instead of being *inflammable* would *put out a light*, *as I have proved* in *intestinal wounds* made upon *animals*. The *best way* of employing it is *by steady pressure* from a *four gallon bag*, as suggested by Senn for hydrogen, but where the *external wound* is *small* the gas might be *rapidly injected* by a *good constantly flowing syringe*, and in an emergency a *strong pop bottle* or *syphon* might be used, the power of the gas as it is generated creating pressure and doing the work. Where *perfectly pure hydrogen*, or the *chemicals to make it*, can be readily procured I would *prefer it*, *used* with the *gauze* as described above, especially where the *permeability* of the *intestines* is to be *proved* by its *escape* from the *mouth*, since the carbonic acid which has *gone through* the intestines might be *mistaken* for *that* which is *supplied* by the *breath*, but for *abdominal wounds* and *general use*, *carbonic acid seems* to be *more handy*. In the country where nothing better can be obtained, *atmospheric air*, *impregnated with mint* or *spices*, may be *forced into the rectum* from a *large bladder* or syringe, and its presence be made *manifest*, either *by the odor*, by *holding a light near the wound* to *see* if it *flares*, or *by placing the cheek* and *ear close* to the *wound*, to *both feel* it *fan* and *hear it* as it *escapes*. There is one other *fact* in this connection that *may prove* of *importance*. *Gas*, when *blown over a surface full of bacteria* and *excrement*, like the *interior of the rectum* and *intestines*, *is very* apt to *widely disseminate poison* or *germs mechanically* through the *peritoneum*

and *make all the difference* between *recovery* and *death*. Whenever *gas*, therefore, is employed for the determination of *intestinal wounds*, a very *careful toilet* of the *peritoneum* will be *necessary* to *prevent septic peritonitis*, and the *use of gas* for the same reason should be for as *short a time as possible*. Before resorting to any of these gases *or more troublesome devices* in *abdominal wounds*, it would be well to *examine* the *aperture* with a *lens*, and then *turn* the *patient* with the *wound downward upon a clean white plate*, in order *that blood*, or *anything extravasated*, may *run out* and *be caught upon this*, and then *test it* by the *microscope* or *chemical means*. Thus in *stomach wounds*, food and *starch* will *sometimes* be *found* in the *dish*, and can be *detected* by its *appearance* or the addition of a small quantity of *tincture of iodine*, causing a *blue color*, and where the stomach, when perforated, is *empty* and *vomiting absent* we can give the *patient* some *sugar of lead* or *tannic acid* in *water*, in order that *part of the solution may run out* and be *infallibly detected* by *appropriate tests*, such as *iodide of potash* for the *lead* and *iron* for the *tannic acid*. The *treatment* of *abdominal affections* has also *made* corresponding *advances*, and I think we are *safe* in putting down the *truths of surgery* at $\frac{10}{12}$. We have now examined the various branches of medical knowledge, and it is only necessary to *add up the work* to make it *complete*. Reducing the fractions to the same denominator, *we find* that the *nine branches*, instead of being equal to the *whole of* $\times$, or $\frac{216}{24}$, as was *supposed in the beginning*, are *only equal* to $\frac{153}{24}$, which is between $\frac{2}{3}$ and $\frac{3}{4}$ *of that number*, and according to this showing we are less than $\frac{3}{4}$ *as certain* in the *whole of medicine* as we *ought to be*. If we wish to find out the *degree of positiveness* of *diagnosis, prognosis* and *treatment* in the *three practical* branches of *medicine, surgery* and *obstetrics*, it will only be necessary to divide each of these into three parts, making 15 branches in all, and proceed as we have already done. To render *diagnosis* at the *bedside positive*, the same numerical plan may be adopted, remembering, of course, that some diseases have pathognomonic or characteristic symptoms that enable us to decide at once with certainty, while others show resemblances that only the most skillful can distinguish. Were I *writing* a *Practice of Medicine, or Surgery* I would place at the *head of each disease* the *number of symptoms*, so that when we *examine* pstients the number would readily *occur to us*. Thus, for instance, when dealing with inflammation I would say 6 *symptoms, redness, heat, pain, swelling, interference* with *nutrition* and *interference* with *function*, and at the *bedside* would *write them down*, using the number *found present* as a *numerator*, and the *number* that *ought to be there*, according to the book, as a *denominator*, and in this way would become *more* or *less positive*. If 5 out of the 6 *symptoms* of *inflammation* (provided each had the same value) *were present*, we *could be* $\frac{5}{6}$ *sure* it was before us, and so with other more obscure diseases. The *greatest degree* of *diagnostic certainty* is probably reached in *eye diseases*, because the eye is associated so closely with physics and with its lens resembles an optical instrument. "The optic is the only nerve" says Loring "that is open to inspection physiologically," you can *see its expansion*, *behold* its *blood vessels*, *notice* their *courses*, the *epithelium* that *shines through*, the *degenerations* of *nerve or bloodvessel*, the *injuries to both*, we can even *see the vessels pulsate*, *all this*, and *more than this*, *cupping* of the *disc*, *differences of level*, and *faults of structure* does the *ophthalmoscope show*. Even the *touch of the eye* gives *important information*, for its *tension* is almost *diagnostic* of a very serious disease. Is it *any wonder then* that so *many who regard precision*, should *love* the *eye*, and that *situated* as it is just *below the dome* of *thought*, *looking upward* and *forward*, but *never backward* it should become *an emblem of progress*, *so great*, that *when we learn to use* it *well*, *carefully* as the *flower of the body*, there should *bloom forth thoughts* to *fill the world*. We have been *speaking* of *facts*

gathered by this organ and I cannot leave the subject without soberly asking what have we contributed. I do not mean, what rehashes have we published in Medical Journals or what facts have been found and ignored but I do mean, what original work have we done, and made known, to pile and rub against the hard facts of others, that the mountain of truth may rise and shine. That it will shine is evident from the amount of certainty already attained, and from it many will kindle their torches as they "go onward to perfection" and become great lights in the Medical World.

Society Reports.

THE CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD JUNNE 4, 1888.

The 212th meeting of the Clinical Society of Maryland was called to order by the President, Dr. N. G. Keirle in the chair.

Dr. Hiram Woods presented the patient he had intended to show at the previous meeting but who was not able to attend that meeting.

CASE OF SYPHILTIC IRITIS.

The patient was a young man of 24, and had first applied for treatment on May 4th. In January last he had contracted syphilis, the primary sore being followed in due time by a papular syphiloderm. This eruption was visible at the time of his first visit. He had received no constitutional treatment until he came to the Presbyterian Eye and Ear Hospital on the date mentioned. He complained only of dim vision and did not suffer much. Both eyes showed well-marked iritis, with pink circumcorneal injection. In the iris of the right eye, and directly in the vertical meridian were two yellow, pustular-looking bodies—one just above, and the other below the pupillary margin. The left eye showed one similar body in the vertical meridian and about ½ line below the pupil. There were pupillary adhesions to the lens capsule which only partially yielded to atropia. The patient was given 1-16 gr. of hydrarg.-bichloridi thrice daily, and a 4 gr. sol. of atropia was used every 4 hours. Three days later the mercury was given 4 times daily, and subsequently every 3 hours without apparently affecting him. In the meantime, the gummata in the right eye continued to increase in size, pushed their way in front of the iris, encroaching on anterior chambre, and eventually touching "Descemet's" Membrane. At the same time they approached one another and completely obliterated the pupil. The gumma in the left iris also rapidly grew toward the cornea and pupil. A similar swelling appeared in a day or two directly above the pupil and grew out rapidly, meeting the one from below and obliterating this pupil almost entirely. Two smaller yellowish gummata also appeared—one on each side of the pupil—deep in the stroma of the iris, and directly in the horizontal meridian. The man now had to be led about, and was admitted to the hospital as an indoor patient. To the 1-16 gr. hydrarg.-bichlorid. every 3 hours there was now added the inunction of one dram of mercurial ointment twice daily. These measures produced constitutional effects in three days, and from that time on he has rapidly improved. At the time of last meeting—two weeks ago—he was unable to get about, and gummata completely closed both pupils. To-night he has walked to the hall alone. All that now remains of the iritis is the rapidly disappearing gumma in the left iris, directly above the pupil, and a number of posterior synechia in each eye. Close examination also shows partial destruction of iris tissue at the sides of some of these gummata. There are several interesting points in the case, one of which is the difficulty experienced in getting the man under the influence of mercury. When this was finally done his improvement was prompt. The sym-

metrical position of gummata in the vertical and horizontal meridians of each eye, and in the deep stroma of the iris is also worthy of mention. Usually they are directly on the pupillary margin, and in any meridian of the eye.

As stated, they presented the appearance of large prestules; so much so that at one time it was thought that the gummata were undergoing a purulent degeneration—a termination of the gumma which is occasionally but rarely seen. Had this been the case, there would probably have been at some time pus in the anterior chambre which would have been recognized by the fluid sinking to the lowest part of the chambre, and having a smooth, level, superior surface. The yellow gumma in the lower part of the iris was distinctly separated from the bottom of the anterior chambre and had an irregular, oblique, superior border. The gummata have, as usually happens, been slowly absorbed, causing more or less destruction of iris tissue. The patient will, however, have useful vision.

POINTS IN LEGAL MEDICINE.

Dr. N. G. Keirle discussed some points relative to legal medicine and exhibited several specimens. He first showed a photograph of a corpse, that came to Baltimore from New York in January last packed in a trunk. Death had taken place one week previous to its examination. The head was missing. No visible marks of any kind, not even a vaccination scar, were found any where on the body. There was an enlargment of a finger joint that played a particular part in the trial because it was known that the man possessed such a deformity. The condition of the lungs was of a salmon-colored red. The pericardium was bulged and on being open air escaped but no fluid. The cause of death was reported to be in the part of the body missing. The hyoid bone was broken, which is said to be a rare occurrence. This case taught that we must always consider not only possibilities but improbabilities as well. The labels on the trunk were found to contain the very number of the house where the criminal lived. It was proven that the individual who did the crime was under the influence of liquor. The head was thrown into the East river. Could it ever float? If absorption of the brain and fibrous tissue took place, it might. The investigator may at some time have to play detective. In another case death had taken place for three days. On the person was found a label on which was found the words "ightman elphid." In the apartment there was nothing special to be noted. A water closet was there which was always flushed. In the gooseneck pipe of this closet a glass stopper was found. What are the chances of finding the bottle to which it belonged? An examination of the well deneath was made and the bottle was found floating on the surface of the water it contained. Here it had been for three days. Thus the label turned out to be that of Powers and Weightman, of Philadelphia, and it was from a bottle that contained the poison which produced death.

Some attention of late has been called to the character of wounds resulting from contusions. He showed a piece of bone from a skull which had been broken by a billy, the scalp over which appeared as if it had been incised.

A negro man—medium as regards health, &c.,—was kicked on Sunday night in the abdomen and on Monday he died. He was admitted in the Maryland Unviersity Hospital and the resident physician was unable to fine any urine in his bladder. Violent peritonitis and congestion of the kidneys was found at the autopsy. The lymph follicles were enlarged and resembled tubercles. A rent was found in the jejunum. Could this be due to violence? The stomach was opened and its mucous coat was found to be torn on both the back and front. The other coats were normal. The autopsy was made on Tuesday. The heart contained air and an emphysematous condition was found in the thorax. It may have been due to the early putrescent change the result of the peritonitis.

The next specimen was the skull of a woman who had been murdered. The body had found its way to the dissecting room. Autopsy showed depressed bone in the skull and two stab wounds in the heart. The attendant, who prepared bodies for anatomical purposes, was asked if there was any blood in the thoracic cavity? He said no, and gave an opinion that there was enough to cause death from natural cause. It subsequently turned out that death was the result of foul play and that a hammer and a brick had played a part. A knife was also used to inflict the wounds in the heart. He then compared the skull with another one on which the same hammer was used to fracture it. The appearance of the fracture was very similar. Wounds that are instantly fatal are had to distinguish from those made on the cadaver.

Dr. Geo. H. Rohe said as regards the fact whether decomposition, going on in the skull after it had been in the water, would cause it to float, he is inclined to think it an impossibility. Decomposition would not lighten its weight because the area can not be distended and for that reason its weight would remain the same.

Dr. Witfield Winsey reported a

A CASE OF PNEUMONIA WITH PROLONGED HIGH TEMPERATURE.

Dr. Randolph Winslow in discussing the case said that antifebine is one of the most useful antipyretics.

Dr. R. M. Hall said that in our locality the influence of malaria is a very decided one and whenever he has a case of any special disease he always bears that fact in mind.

Dr. R. W. Johnson said that he wanted to endorse the views of Dr. Hall. He was treating a case at the time where malaria was undoubtedly a complication.

Dr. J. H. Branham said that there were a number of interesting points in Dr. Winsey's paper. He was treating at this time a patient, æt. 13 years, in the first stage of pneumonia. A few rales were heard over the base of the left lung and his temperature was high. Antipyrine was used and in a few days the patient was better. In a number of other cases he has found it to act well and he does not believe that it depresses the heart to any extent. If it is used early enough it will sometimes avert the disease. He thinks the part that malaria plays in such diseases is much exaggerated.

Dr. H. H. Biedler said that he agreed with Dr. Branham on the subject of malaria. It is a condition that used to be called biliousness. He thinks it is due many times to the liver not acting. Small doses of quinine act as a good tonic even if they do not influence the temperature. He often bleeds his patients in the first stage of pneumonia and has never seen any bad effect from it.

Dr. G. H. Rohe said that the interesting point in Dr. Winsey's case was the temperature of 106° for sixty hours. Antipyretics should be considered according to the cause of the pyrexia. So we can not speak of any one as being the best.

Dr. W. Winsey said that he was glad to find that one antipyretic existed that did not depress the heart's action. There was no evidence of malaria present in his case at all. He thinks the word *malaria* is a very much abused one and is often used to explain symptoms that a more diligent study would find due to some other cause. If we bear in mind that elevated temperature is a part of the clinical history of the disease we can be much more rational in our treatment of it.

Dr. Randolph Winslow read the next paper, entitled cut throat, after which he showed a specimen of bone from the hip of a patient on whom an amputation of the thigh had been previously done. All that remained of it was a mere shell, and the cause of it was thought to have been tuberculosis.

Dr. H. H. Biedler said that once he amputated a leg for tubercular trouble,

and five months subsequently the patient died from tuberculosis.

Dr. J. W. Chambers exhibited a specimen of

VILLOUS PAPILLOMA OF THE RECTUM.

Patient was a colored male, age 37 years. As far back as he can remember something would come out of his bowels, especially after their evacuation. After awhile he was compelled to replace it every time he had stool. He came to him on May 12th for hemorrhoids. An examination revealed nothing. The patient strained and the growth protruded. It was attached by a broad, common base. At the final operation little or no hemorrhage took place, and no bad symptoms have appeared since. He will be able to go to work in a few days. It is comparatively a rare tumor in the rectum and is thought to be simple, though, Allingham reports two cases where it was followed by epithelioma; it is similar to those found in the bladder, though in this locality they are frequently malignant in character.

Dr. Samuel T. Earle said he had seen this case and it was very interesting. Nearly all of these tumors are pedunculated. This is not. Both microscopically and Macroscopically it would indicate that it was not malignant. He had once before seen a villous like tumor passed by a patient and it was found to have adenoid tissue in it.

W. J. JONES,
Secretary.

Correspondence.

A VISIT TO THE PASTEUR INSTITUTE.

PARIS, June 26th, 1888.

Editor Md. Medical Journal:

It is now generally admitted, and statistics show abundant proof, that M. Pasteur's method of preventing hydrophobia by inoculation is effectual, and at last this dire disease, which has baffled the skill of medical men during all the ages, is successfully combatted.

It was my privilege a few days since to be shown through the laboratory in which this great discovery was made. Pasteur himself is not often present when the inoculations are being made, but every morning his assistants devote several hours to the work of inoculating patients who have been bitten by dogs known to be rabid. During the last month the attendance by such persons, who come from all quarters of the globe, has been about one hundred daily. Each dog is inoculated once a day for about 12 days, unless the physicians have reason to fear the rapid approach of the disease; in such cases they institute what is known as the intensive treatment, and inoculate twice a day, thereby bringing them more rapidly under the influence of this protective virus. The method of procedure is about as follows: A patient applying for treatment must have proof that he has been bitten by a dog really mad. The virus which is used for the inoculation is obtained from the spinal cord of a rabbit which has died of rabies on the 10th day after its inoculation. The cord is of most intense virulence while fresh, and if used immediately would cause rabies in seven days in a rabbit.

Of course patients are never inoculated with such virus at the outset, but as the cord loses in virulence each day, it is thought proper for the first inoculation to be from a cord that has been drying fourteen days, the second from one of thirteen days, and so on, using stronger virus each day, until the last inoculation the patient is able to stand that of three days drying. He is then considered to be proof against hydrophobia. In man the incubative period of hydrophobia is always uncertain, depending upon the amount of poison entering the system, etc., but in animals Pasteur has brought it to a point of mathematical precision. Each day three rabbits are inoculated by intracranial injection, from virus obtained from the medulla of a rabbit which has succumbed that day to the disease. In six days they will show signs of rabies, from which they die on the tenth day. The spinal cord and medulla

of two of them are saved. The medulla, which is the seat of virus of the most intense virulence, is used immediately for inoculating fresh rabbits. The spinal cord of each is divided into three pieces, and suspended in jars containing a small amount of caustic potash. They are set away to dry in a chamber kept at a uniform temperature of from 23° to 27° C, and will be ready for use any time during the next fourteen days.

According to the report of Dr. J. R. Suzor, 3,020 patients had been treated at the Pasteur Institute up to the month of March, 1887. Of these only 34 died of hydrophobia, a mortality of 1.15 per cent. 213 of these cases were bitten about the face and head by dogs proven to be mad by experimental inoculation in the Pasteur laboratory. The usual mortality formerly in such cases has been 81 per cent., but under Pasteur's treatment only 11 died, or 5.16 per cent. This method is now practiced in St. Petersburg, Vienna, and various other cities of Europe, and in 3,852 patients so treated there has been 54 deaths, or 1.40 per cent, the former death rate being 20 per cent. It is useless to add more to show the value of this great discovery.

It is gratifying to know that, unlike the fate of many of the world's greatest benefactors who die unappreciated by their day and generation, M. Pasteur still lives to enjoy the well-merited honors now showered upon him.

E. Oliver Belt, M. D.

Reviews, Books and Pamphlets.

Causation and Prevention of Pneumonia. A pamphlet on the Causation of Pneumonia, by Dr. Henry B. Baker, is being distributed by the Michigan State Board of Health. It is an 85-page pamphlet, and is a compilation of statistics, collected by the State Board of Health, relating to pneumonia in Michigan and in other parts of the world. It is a thorough consideration of the subject, and seems to prove that pneumonia is controlled by temperature and humidity of the air. The pneumonia increases after the atmosphere is cold and dry, and decreases after the air is warm and moist. One would suppose that such climatic causes could not be controlled, but Dr. Baker points out how he thinks the disease may be greatly lessened by controlling the temperature, and especially by moistening all air which requires to be warmed, in all buildings, public and private. During the time of greatest danger from the disease, (cold weather,) most people spend half their time in buildings where such conditions can be controlled, and Dr. Baker claims that it is the long-continued exposure that causes the disease; so that, if the indoor conditions are properly cared for this disease will be greatly lessened.

A Practical Treatise on the Medical and Surgical Uses of Electricity, including Localized and General Faradization; Local and Central Galvanization, Franklinization ; Electrolysis and Galvano-cautery, by Geo. M. Beard, M. D., Fellow of the New York Academy of Medicine; the American Neurological Association; etc., and A. D. Rockwell, A. M., M. D., Professor of Electro-Therapeutics in New York Post-Graduate Medical School and Hospital; Fellow of the New York Academy of Medicine; Member of the American Academy of Medicine; the American Neurological Association, etc. Eight vo., cloth. Nearly 200 illustrations; pp. 758; sixth edition. Revised by A. D. Rockwell, A. M., M. D. Wm. Wood & Co., Publishers, New York, 1888.

Papillomatous Cystic Tumor of Ovary, with a Hernial Pouch developed in the Cicatrix of the Abdominal Wound from a Former Ovariotomy, by L. H. Laidley, M. D., Professor of Gynecology, Beaumont Medical College; Surgeon to Protestant Hospital; Consultant to St. Louis Female Hospital. Read before the St. Louis Medical College, March 10, 1888. Reprinted from the Journal of the American Medical Association, April 14, 1888. Chicago: Printed at the office of the Association, 1888.

The Disorders of Menstruation, by Edward W. Jenks, M. D. The Physicians' Leisure Library, Number II. Price 25 cents. George S. Davis, Publisher, Detroit, Mich.

Atlas of Venereal and Skin Diseases, edited by Prince A. Morrow, A. M., M. D., Clinical Professor Venereal Diseases, University of City of New York, etc. New York; Wm. Wood & Co., 1888. Large folio; in monthly parts, each containing 5 folio, Chromo-Lithographic Plates, and from 16 to 20 folio pages of text; to be completed in 15 parts. Set $30, payable $2 on delivery of each part. Fasciculus IV. (From Publishers.)

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BALTIMORE, JULY 21ST, 1888.

Editorial.

THE THERAPEUTIC USES OF CODEIA.—The views expressed by writers in regard to codeia have been conflicting and unsatisfactory. It is well known that all the beneficial properties of opium are not possessed by morphia. Many of us, therefore, have hoped that in codeia we would find a remedy which would relieve pain and sleeplessness without producing the nausea and constipation which so often follow the use of morphia.

Dr. T. Lauder Brunton, lecturer on therapeutics in St. Bartholomew's Hospital, London, publishes in the *British Medical Journal*, of June 9, 1888, some valuable observations upon the subject. He reviews briefly the experience of earlier investigators. Codeia was discovered by Robriquet, in 1832, and first tested upon his own person by Gregory, who found it a stimulant and a gentle laxative. Barbier next recommended it for pain about the stomach, arising from irritation of the great solar plexus. He gave a grain in syrup, and repeated if necessary in an hour or two, with the best results. It generally produced refreshing sleep without unpleasant after-effects. Berthè carefully studied it, finding that in dogs it lessened greatly the irritability of the intestines. Dr. Brunton himself tried it in intestinal pain of the lower part of the abdomen in many cases of various kinds. In one case, thought to be inflammation about the cæcum, a grain of codeia in pill relieved the intense pain in the right iliac fossa, and in repeated dose kept it subdued. A lady of fifty years suffered from pneumonia of the base of the right lung, with a dilated heart, a pulse irregular and so weak that it could hardly be counted, and pain radiating from the epigastrium. She was jaundiced and had a tumor, probably of the kidney or liver. Codeia was given in half grain doses, and relieved the pain "as if by magic." In cases of obscure abdominal pain, in cancer of liver and pancreas, and in supposed malignant disease of the intestines its use was followed by relief of pain. Dr. Brunton gives it in pill with extract of gentian, ½ grain of it three times a day, increased at times to 1 grain as often as required. As a rule it does not cause drowsiness nor interfere with the digestive functions. He considers that it is a powerful anodyne for abdominal pain, and can be pushed further than morphia without causing drowsiness or interference with respiration, or with the action of the bowels.

In pain with diarrhoea, morphia and opium are better. In chronic enteralgia, it has continued to relieve pain for months together, without increase of dose beyond 1 grain t.i.d. He thinks it may regain favor as a pain-relieving agent.

We find it difficult to reconcile Dr. Brunton's statements with the testimony of physicians who have used it with uniform success for months at a time in insomnia. Possibly in these cases intestinal or gastric irritation alone prevented sleep. We believe that codeia is much used by physicians as a soothing ingredient in cough mixtures.

ANTIPYRINE.—A growing professional experience has accorded to antipyrine a high place among therapeutic agents. As an antipyretic this drug ranks among the best of these agents. Though its influence upon the circulation and nerve-centres calls for a cautious administration in high temperature, its value should not be lost sight of in febrile conditions, especially where pain enters as a factor, as in acute articular rheumatism. But

it is not so much as an antipyretic, but as an anodyne, that antipyrine has shown its useful properties. Following close upon the discovery of its antipyretic effects was the disclosure of the fact that it possessed most valuable pain relieving properties, and it has been in this direction that an experience has grown which has shown the wide range of its application and usefulness. It seems to possess, to a happy extent, the useful properties of opium, with none of the latter drug's bad effects, nausea, vertigo, etc., and, in fact, has been proposed as a substitute for the "opium habit," with good effect. As an anodyne, antipyrine has been administered in powder or solution, in doses ranging from 3 to 15 grains, according to age and indications. Hypodermically solutions of the drug have been employed in angina-pectoris, hepatic colic, *tic douloureux* and neuralgias of all forms, with favorable results. It has also been observed that it possesses a decided hypnotic action, producing quiet and refreshing sleep. In headache, whether of malarial or stomachic origin, it has proven a powerful and effective remedy. Whooping-cough, asthma and spasmodic croup have each been successfully combatted by the administration of antipyrine, thus showing its power over muscular spasms. Chouppe was among the first to suggest the use of antipyrine in uterine colic, and quite recently Dr. E. H. Grandin, of New York, *N. Y. Med. Jl.*, (July 14, 1888,) has called attention to the value of the drug during labor. Having previously employed antipyrine successfully in dysmenorrhœa, Dr. Grandin began to administer the drug during the first stage of labor, as a substitute for opium and chloral. His habit has been to give fifteen grains, well diluted, and preferably with some stimulant, such as the aromatic spirits of ammonia, and to repeat the dose one hour thereafter. In two hours after the second dose the patient receives ten grains, and so on every two hours if needed. The result of this practice, Dr. Grandin states, has been to nullify the pain, and to render the first stage of labor practically painless. No untoward effects to mother or child have been observed.

It has thus been noted that the usefulness of antipyrine is being rapidly extended, and it seems likely that it will occupy the first rank among the anodynes. Whilst such is the case, it must be borne in mind that the drug is not void of danger, but, on the contrary, has proven treacherous and disappointing. In many cases it is a decided heart-depressant, and collapse has followed its administration in a number of instances. It has, likewise, induced unpleasant effects upon the nervous system, such as dizziness, headache and cerebral excitement. The continual use of the drug has induced fatty degeneration of the kidneys and liver, in a case observed by Porter. Skin eruptions have likewise followed in the wake of its use. Bearing these facts in mind, antipyrine may be found extremely satisfactory in the vast majority of cases when it is judiciously employed.

Miscellany.

The Paquelin Cautery in Acute Epididymitis.—The use of the actual cautery in acute epididymitis was first suggested by Dr. W. S. Halsted. His method consists in lightly touching the surface of the skin overlying the affected organ, with a white-hot cautery point. The operation requires only a few seconds, and if skillfully performed is but moderately painful. A dressing of iodoform ointment is then applied and the patient instructed to wear a suspensory bandage. Instant relief from pain almost invariably follows the application of this treatment, and the patient, as a rule, is able to be up and walk about in comparative comfort.

I have treated forty-six cases by this method, and in only two instances have the patients been obliged to remain in bed after the first application, and in one of these the real cause of the enforced rest was a co-existing cystitis.

It may be added in this connection that marked relief from pain in gonorrhœal rheumatism may also be effected by a similar use of the cautery and iodoform ointment, and this combined with

absolute rest has in my experience proved the most satisfactory method of managing this obstinate class of cases.

Another method of applying strong counter-irritation in acute epididymitis is by means of a sixty-grain solution of nitrate of silver applied to the surface of the scrotum. I have employed this in thirteen cases, often with marked success. It, however, has the disadvantage of frequently causing a slough of the epidermis, leaving often an extensive patch of superficial ulceration.—*Geo. E. Brewer, M. D., Jl. Cut. & Ven. Dis., July*, 1888.

Morphia in Puerperal Eclampsia.—G. Veit (Bonn) recommends the exclusive use of morphia (by subcutaneous injection) in the eclampsia of labor, and ascribes the hitherto inefficiency of the drug to the much too small doses in which it has been given. Beginning with half a grain, one should boldly increase in twenty-four hours up to a grain and a half or even three grains. The apparent success of this treatment, by which during a series of years Veit lost no cases of eclampsia, made him so confident that he announced in his lectures that no one should ever allow a patient to die in eclampsia. But in the last year Veit lost two cases, and he therefore advises in severe cases to make use of hot baths (110° F.) with subsequent wrapping in blankets. Speedy delivery, so far as can be practiced without undue injury to soft parts is always indicated.

The experience of Veit is interesting, and shows that the morphia treatment, to be successful, must be pursued heroically. It is a fair question, however, how far Veit's success was due to morphia and how far to the "speedy delivery" which he says is always indicated. Certainly speedy delivery under anæthesia, with subsequent treatment directed to the skin and kidneys, is almost invariably successful; and it is difficult to see how morphia can save a case which does not respond to the above treatment.—*Boston Med. and Sur. Jl.*

Quiet Iritis.—Hutchinson, Jr., reports several cases of iritis in which the attack, sometimes leading to extensive adhesions and involving much deterioration of sight, was from the first unaccompanied by the typical features of inflammation. Iritis in certain cases does not reveal its presence by the characteristic frontal pain, and is practically unattended by congestion or photophobia. Spmpathetic inflammation, congenital syphilis, and inherited arthritic tendency are probably the most frequent causes of quiet iritis. This form is very rare in the iritis of acquired spphilis, that of the ordinary rheumatic type, and in traumatic or herpetic iritis. Sex and age have little or no influence in modifying the severity of the symptoms accompanying iritis. A constitutional tendency can not always be invoked as the reason for iritis taking on an insidious form, as shown by the occasional occurrence of two attacks in the same patient, one being accompanied by violent inflammatory symptoms, the other being perfectly quiet throughout. The absence of the ordinary symptoms of iritis by no means always implies a mild course of the disease.—*N. Y. Med. Journal.*

Treatment of Chronic Diarrhœa.—Debove, in a recent communication to the Medical Society of the Hospitals, claims great success in the treatment of chronic diarrhœa, especially of the tuberculous form, generally so little amenable to therapeutic agents, by silicate of magnesia. This remedy he administers in massive doses, half an ounce to an ounce and a half a day suspended in a quart of milk. As a result of this treatment the diarrhœa disappears completely, and gives place to an obstinate constipation. The silicate of magnesia is known under the name of *talc* or *steatite*. The powder of talc is insoluble, inert, and has not heretofore been supposed to have any medicinal properties whatever. According to Debove, it has sedative properties on the digestive tube similar to those of bismuth, than which it is safer—it promotes the healing of intestinal ulcerations, but seems only to be efficacious by its presence in massive quantities. This substance, Debove says, is readily and rapidly eliminated from the intestines.—*Boston Med. and Sur. Jl.*

The National Association of Railway Surgeons.—The preliminary meeting of the above Association was held at the Palmer House, Chicago, Ill., on June 28. The meeting was very largely attended. Sixty-three railroads were represented. The Association starts out with a membership of 600, and promises to be one of the most active surgical associations in the United States. The Association elected the following officers for 1889:

President—Dr. J. W. Jackson, Kansas City, Mo.

First Vice-President—Dr. J. H. Murphy, St. Paul, Minn.

Second Vice-President—Dr. J. B. Murdock, Pittsburg, Pa.

Third Vice-President—Dr. W. W. Ridenour, Massillon, Ohio.

Fourth Vice-President—Dr. B. L. Hovey, Rochester, N. Y.

Permanent Secretary—Dr. C. B. Stemen, Ft. Wayne, Ind.

Corresponding Secretary—Dr. E. R. Lewis, Kansas City, Mo.

Assistant Secretary—J. H. Trussel, Alliance, Ohio.

Treasurer—Dr. R. Harvey Reed, Mansfield, Ohio.

Next place of meeting St. Louis, Mo.

Bichloride of Mercury in the Treatment of External Diseases of the Eye.—Alt ("Amer. Jour ot Ophth," Nov. 1887) considers that sublimate solutions are very valuable aids in ophthalmic therapeutics. The strength in which he uses the drug varies from one part in 2,500 to one part in 5,000. The first solution sometimes causes severe pain, and must then be diluted. In all cases the solution is to be *poured* into the eyes while the patients are recumbent. In simple conjunctivitis with hardly any discharge, but with heat and dryness of the lids, instillations of sublimate solutions morning and evening act very well. In acute catarrhal conjunctivitis it is not so satisfactory, but in chronic catarrhal conjunctivitis it is very agreeable to the patients. In phlyctenular conjunctivitis it has a bad effect. In all forms of purulent conjunctivitis the frequent irrigation of the conjunctival sac with a solution of 1 to 2,500 is extremely efficacious, and Alt has obtained the same excellent result in diphtheria ot the conjunctiva. In trachoma the remedy is of great help, as well as in blepharitis ciliaris. Ulcers of the cornea all do better when freely irrigated with the sublimate solutions.—*N. Y. Med. Journal.*

Liability of Druggists for Clerks' Mistakes.—The Supreme Court of Ohio has recently reiterated the general rule of the liability of druggists for negligence in putting up medicines. In this case the druggist clerk, when asked for "oil of sweet almonds," carelessly gave the "oil of bitter almonds," and the plaintiff's wife died almost immediately after taking the poison. There was nothing on the bottle to indicate that it was a virulent poison, and it was clear in the evidence that there was gross negligence on the part of the clerk. The druggist denied his personal liability for his clerk's mistake, but at the trial the court decided against him, and the Supreme Court affirmed the decision. This ruling is fully in accord with that of the courts of other States, and probably no tribunal would relieve a druggist under similar circumstances.—*Med. Times.*

Mammary Cancer in the Male.—Two cases of cancer of the breast in the male subject are recorded in a recent number of the "Archiv für klinische Chirurgie," one observed by Dr. Berns, of Amsterdam, and the other by Dr. Franke, of Brunswick. The history of the latter is furnished by Dr. Schuchardt, of Gotha, and abstracts of the two histories are given in the "Centralblatt für Chirurgie." Berns's case was that of a man, forty-two years old, whose breasts had attained to very great size in his youth and had quite the character of a woman's at the time of the observation. The tumor, an alveolar carcinoma, was situated on the outer aspect of the right breast. It was removed, but returned, and, after a second operation, proved fatal by dissemination, but without involvement of the axillary glands. In Franke's case the patient was sixty-nine

years old, and the tumor, which was seated in the right breast, was as large as a walnut.—*N. Y. Med. Jl.*

Treatment of Chancroid.—Dr. Geo. E. Brewer, of New York, writes in the *Journal of Cutaneous and Venereal Diseases*, July 1888. The most satisfactory treatment for chancroid which I have employed is thorough cauterization with pure nitric acid and the subsequent application of salicylic acid powder,—the object being, first to convert the infected ulcer into a healthy one, and then to prevent reinfection of the wound. While this method succeeds admirably among the better class of patients, it often fails completely in hospital practice from a failure to carry out the after treatment. I have frequently seen reinfection take place in ulcers that have been perfectly healty for several days, by simple contact with clothing upon which the dried secretions from the original sore had been allowed to remain.

A method, which in my hands has proved valuable in this class of cases, but which, as will be seen, is applicable only to chancroids occurring behind the corona glandis, is the following:

The organ is cleansed with a strong solution of bichloride,—all ulcerated points thoroughly destroyed with nitric acid. Salicylic acid powder is then heaped upon the wound and covered by a strip of thin rubber protective which completely encircles the penis. This should be snugly applied and held in place by a few layers of absorbent gauze and a small bandage. The heat and moisture of the body soon cause the thin rubber tissue to adhere to the skin, completely sealing the wound; its elasticity, also, allows of considerable change in the size of the penis without disturbance. This dressing should be left in place for from three to six days, and completely protects against reinfection. If properly applied the resulting ulcer is always healthy and closes rapidly. I have applied this method in ten cases with most satisfactory results, in several of which very extensive ulceration was present.

Lanolin.—Lanolin alone is said by Professor Fraenkel, in the *Chemische Zeitung*, to be an excellent application, in incised wounds and burns. In incised or lacerated wounds, bleeding is said to cease immediately, and the wound may even be bathed in rapidly-running water without removal of the lanolin. In burns, also, it is said to be most excellent, and prevents the formation of crusts and scabs, while entirely protecting the surface from the atmosphere.—*National Druggist* May 1, 1888.

The Treatment of Dysmenorrhœa.—Goubert (*Gaz. de Gynécol.*) prescribes for young girls:

Iodoform . .	gr. 5
Ext. belladonna. .	gr. $\frac{1}{6}$
Asafœtidæ . .	gr. 1,5.

In pill form.

Beginning six or eight days before the time of menstruation, six pills should be taken daily.

For adult women he prescribes:

Potass. iodid. . .	℥i.
Tinct. croci. . .	℥ii.
Tinct. belladonn. .	℥iii.
Syrup. aurant. cort.	ad ℥ iv.

Dose a tablespoonful morning and evening, in any convenient liquid, for a week preceding menstruation.—*Canada Lancet.*

The Use of Antipyrine in Whooping-Cough.—Dr. L. E. Holt spoke of this treatment, which had been introduced only a few months before. He had tried it in six or seven cases in children about five years of age. Two-grain doses at intervals of three hours were given, a double dose being administered at bedtime. There had been very marked relief within twenty-four hours, in the reduction both of the number of spasms and of their severity. The diminished severity of the spasms during the night was very marked. In one child which had had from twelve to fourteen spasms during the night the number was reduced within forty-eight or seventy-two hours to two or three, and it was enabled to sleep without diffi-

culty. In some of the cases belladonna had been given previously without material benefit. The speaker had never seen collapse follow the use of antipyrine.—*N. Y. Medical Journal.*

The Origin of Diphtheria from Birds.—It has been known for some years that birds and poultry are subject to a disease which corresponds to what in the human being is known as diphtheria. Several foreign observers have gone a step further, and have endeavored to show that the disease is capable of transmission from animals to human beings. Last year Dr. Turner drew up an interesting report for the Local Government Board, bearing on this alleged transmissibility, and he adduced a large number of observations which seemed to indicate a connection between a diphtheritic affection, not only in fowls, but in rabbits and cats, and a similar affection in man. The report comprised several instances in which the "strangles" in horses appeared to give rise to a like train of symptoms. In a thesis by Dr. Menzie, the transmission of the disease from animals to man is attributed to the dejections of the former. Diphtheritic affections among fowls are very common in Italy, and he quotes an instance in which four out of the five children of a medical man were attacked and died. In this case he incriminates the thatched roof, which was inhabited by colonies of fowls, geese, pigeons, etc. The dejections of these animals, washed off by the rain, found their way into the cistern or well from which the supply of drinking-water was drawn.—*Medical Press and Circular.*

Formulæ for Rheumatism. — Dr. Chaplin recommends the following for acute rheumatism:

Salicylic acid, . .	ʒ ss.
Sodium bicarbonate,	3 x.
Potassium citrate, .	3 jss.
Wine of colchicum seeds,	ʒ ss.
Simple syrup, .	ʒ j.
Peppermint-water, .	ad ʒ viij.

Sig.—A tablespoonful every three or four hours.

For chronic rheumatism he gives:

Potassium citrate, . . .	ʒ ss.
Tincture of the chloride of iron	3 x.
Essence of lemon, . .	3 j.
Simple syrup, . .	ʒ ij.
Water, ...	ad ʒ iij.

Sig.—A teaspoonful every four hours. —*Medical Record.*

An Antiseptic Paste.—*L'Union Médicale* of May 19th, 1888, gives the following formula for an antiseptic paste:

Iodoform, . .	gr. 40.
Essen. eucalypti, .	3 5.
Paraffin. . .	3 12½.
Vaselin. . .	3 12½.

This paste is especially adapted to the treatment of ulcers.—*Medical News.*

A Salve for Burns.—A salve for burns, said to be most excellent where the blisters are not broken, is made, according to the *Droguisten Zeitung*, by adding 1 part of creasote, 2 parts of bone-black, and 3 parts of rectified spirit to 24 parts of spermaceti salve.—*National Druggist*, May 1, 1888.

As a local application in Neuralgia, *L'Union Médicale* recommends the following:—

℞.	Alcohol. camphor.,	p. 90
	Æther. sulphuric.,	p. 30
	Tinct. opii,	p. 6
	Chloroform,	p. 20

Saturate a flannel with it and lay it over the painful part covering with an impervious material.

Sulphonal.—Mr. Ernest Lovegrove states that the effects of sulphonal upon patients is very discouraging. He finds that for several hours after taking the drug no appreciable effect could be observed, but during the greater part of the following day there was extreme drowsiness, also considerable cyanosis. The best mode of administering sulphonal is to mix it with pulv. tragacanth co. and water.—*British Medical Journal*, May, 26, 1888.

Medical Items.

The International Ophthalmological Congress will be held at Heidelberg, from the 9th to the 12th of August next.

Professor Hyrtl has endowed six scholarships in the Vienna School, to go to worthy students without means, without distinction of nationality or creed.

The eighth annual meeting of the Lehigh Valley Medical Association will be held at Paxinosa Inn, near Easton, on Wednesday, August 15th.

At the recent session of the Examining Board of the Marine Hospital Service there were 21 applicants. Of this number, 4 were rejected on account of physical disability, 3 withdrew their names, and 6 successfully passed the examination.

The Medico-Chirurgical College of Philadelphia and the Philadelphia Dental College have placed a contract for a large building to accommodate both schools.

The faculty of the New York Polyclinic have decided to increase the clinical facilities of this institution by establishing a spacious hospital, immediately connected with the College building. It will be opened for the reception of patients in October next.

It is calculated that 30 per ct. or 7,000 out of 22,000 blind persons in Great Britain have become so through neglected purulent ophthalmia in infancy. This but lends force to what was said editorially in *Medical Science* in the April issue on the importance of general practitioners paying more attention to eye diseases.—*Science.*

Dr. Chas. H. Cockey has resigned the professorship of microscopy and diseases of the throat and chest in Baltimore University. The next session will open with three new professors.

For Neuralgia.—Dr. B. W. Richardson recommends (*Asclepiad*, No. 18) the following formula in neuralgia:

℞	Croton chloral,	gr. ij.
	Quinia,	gr. ij.
	Glycerin,	q. s.

To make a pill; to be taken when the attack threatens, and to be repeated every two hours until relief is obtained.—*Med. News.*

The Massachusetts Medical Society having found that the essays placed in competition for the Shattuck Prize were rarely worthy of the prize, which, on the last occasion, amounted to one thousand dollars, has decided to divert the fund to the purposes of a "Shattuck Lecture," to be given on some subject in accordance with the original provisions of the bequest. The lecture is to be delivered at the annual meeting of the Society, and the honorarium for it and its publication are to be defrayed from the income of the Shattuck Fund.—*Med. News.*

A Clinical School at Detroit.—The matter of establishing a clinical school in Detroit as a department of the University of Michigan, which has long agitated the people of the State, has finally taken definite form and will doubtless soon be realized. The new movement is to raise $200,000, to be placed in the hands of the regents to be used for the establishment of such a clinical department. Moses W. Field promises $20,000, Gen. Alger $10,000, and six others amounts swelling the total to $60,000 already.—*Jl. Am. Med. Asso.*

Artificial Feeding of New-Born Children.—In preparing cow's milk for a new-born child, Stryker says the proper proportion is three parts of water to one of milk. About two ounces should be offered to the child every two hours. Into this put a pinch of salt, a little sugar, and a teaspoonful of lime-water. In the summer the milk gotten in the morning should be brought to a boil, and then put away in the refrigerator, preparing just enough at one time for that meal. Some one should hold the bottle for the baby, so that neither is it deluged with milk from a bottle upside down, nor does it suck air out of an empty one.—*Med. Times.*

Professor Austin Flint says that there is a medical college [in Washington] which recently graduated a class of one: "This college has seven professors, one demonstrator, and one lecturer. For the convenience of students occupied in other pursuits during the day, all the lectures are given in the evening. The college requires a matriculating examination, and has a 'graded course' of three years. It is the medical department of a university, and, in addition to the clinical and other advantages enjoyed by its students, the diplomas from this school are signed by the President of the United States."—*Med. Record.*

Recent explorations at the Island of Cos have, says the *Medical News.* unearthed the site of the renowned temple of Æsculapius, the third in prominence in the mind of the Greek world. The only ones that were held in higher esteem were the temples at Epidauros and Athens. An altar has been found, and a marble serpent, the well-known attribute of the god of medicine. The description that Strabo gives of the temple at Cos would indicate the possibility of a rich harvest if systematic excavations are carried on at this site. He says that its shrine were full of votive offerings, including priceless works of art, and its walls abounded in inscriptions recording the cures wrought there, which Hippocrates is said to have studied, and from which he learned much of his medical lore. The excavations at the Asclepeion of Athens have yielded valuable results, but much remains to be learned concerning the cult and ritual of Greek medicine, which can be discovered only by the bright spade of the scholarly explorer.

Original Articles.

A CASE OF PNEUMONIA WITH PROLONGED HIGH TEMPERATURE.*

BY WHITFIELD WINSEY, M.D.,
OF BALTIMORE.

On March 23d, 1888, I was summoned twice within an hour to see W. B., colored, aged thirteen. His grandmother gave me the following history of his present illness. She said that he had been troubled for several days with a cough, for which she had given him various domestic remedies, as it seemed to be only an ordinary cough, such as prevails in our climate at this season of the year. He had been out with her in the morning of the same day, and stood on the street for a considerable time waiting to see a funeral procession pass. After returning home in the afternoon, about one o'clock, the boy complained of severe pain in the head and right side of the chest, followed by a fever.

She put him to bed. His fever increased, and he seemed, as she expressed it, to be stupid. The fever and stupor were the features of his case that caused her uneasiness, hence the two summons in such close succession.

I found the boy in this stupor, to arouse him from which it was necessary to shake him or to call loudly and sharply. I did this. He opened his eyes, recognized me, said he had pain in his head and side, and immediately relapsed into that condition of stupor from which he had just been aroused. I put my thermometer into his mouth, which, when taken out, registered 106°. His skin was hot and dry, respiration rapid, though my notes do not show that it was counted, pulse 140 and small. Percussion and auscultation gave perceptible dullness over almost the entire right chest, and the presence of the crepitant râle.

I decided that I had a case of acute pneumonia, of grave character to deal with. The temperature was the highest that I had ever met with in this disease, and occurring so early in its development it assumed in my mind a paramount importance, for the time being, *the* symptoms to be controlled, if possible. I, therefore, ordered 20 grs. of quinine in syrup, to be given during six hours in divided doses, turpentine to be applied to the chest, and cloths wrung out of cold water and vinegar to be applied to the head, and to be frequently changed. This was at 8 P. M.

Thinking that my thermometer might be amiss, I tried it upon myself, and it recorded a normal temperature. I saw the boy again at 11.30 P. M. His condition seemed unchanged, neither better nor worse. Next morning about ten o'clock I saw him again. His grandmother said she had watched by his bedside all night, and had carried out all my directions. The stupor still continued; temperature 106°, as when first seen; pulse 150 and weaker than the night previous. Percussion gave perfect flatness over the entire chest. The sputa, though not abundant, showed the characteristic rusty color. I concluded that unless the heart could be strengthened and sustained, the boy would surely die. I prescribed infus. digital., in teaspoonful doses, every two hours; and whiskey and rock candy, in tablespoonful doses, every two hours, alternately, with as much milk as he could be induced to take, there being complete anorexia.

His grandmother asked if she could apply onions to his chest, wrists and ankles, as she had great faith in the efficacy of onions in breaking up fever. Consent was freely given. The cold applications to the head were continued. Saw him again at 4 P. M. Temperature same as in the morning, 106°, pulse 132 and a little firmer, condition otherwise unchanged. Ordered saline purgative, otherwise same measures continued. Saw him again at midnight. Temperature same, 106°; pulse 120, regular and a little stronger. The purgative had moved the bowels twice, condition otherwise unchanged, and same treatment continued. Saw him next morning, third day, between ten and eleven. Stupor though still present, less marked. Temperature 104, pulse 120, fairly strong

*Read before the Clinical Society of Maryland.

and regular. Ordered the digitalis and whiskey to be given every four hours, instead of every two hours, and, in addition, ordered syr. doveri, half teaspoonful every four hours, as cough was quite troublesome. Was prevented from seeing him again till next morning at about the same hour. I found his condition, as far as I could determine, about the same as day previous. He had been induced to take more milk during the previous twenty-four hours, for the sake of the ice which it contained, cold liquids being craved, as is usual in such cases. Treatment continued without any material change. Next day, the fifth, temperature and pulse same, 104* and 120 respectively.

The following morning, when seen, condition practically the same, though his grandmother thought he must be worse, because, as she said, he had passed such a bad night, very restless, with muttering delirium. Treatment continued without material change, except spts. nit. ether was ordered to be given in half teaspoonful doses, every two or three hours, should the marked restlessness and delirium return that night. Next day, the seventh, the boy was reported as having passed a very good night. Temperature 102*the lowest it had been since the first day of attack; pulse 108. That resolution had begun was evidenced by the presence of broncho-vesicular, together with the bronchial respiration which had alone been present since the second day. Resolution continued, his general condition slowly improved; temperature ranged between 102–3*, until the tenth day, when it had fallen to 99*; pulse 100. On the night of the tenth day, the night of the blizzard, had hæmoptysis, from the account of which I would judge he lost from 8 to 10 ℥ of blood. Gave fl. ext. ergot. in 30 drop doses every three hours. Had no more active hemorrhage, only spitting of blood, which lasted for several days. Aside from increased weakness, which followed this loss of blood, the boy continued to improve under cod liver oil and tonics, which gave him a ravenous appetite, and I ceased my visits on March 31st, thirty days from the beginning of the attack. I have seen him within a few days, and I could detect no evidence of tubercular deposit, of which I feared the hæmoptysis might be the fore-runner, and he seemed, as he said he felt, "all right."

I have been induced to report this case for two reasons: First, the rapidity of its invasion, the extent of lung affected, and the unusually high temperature for from 30 to 60 hours, its continued range of 104* until the seventh day, and the occurrence of hæmoptysis a few hours after the crisis had been passed. Secondly, because of the large mortality from this disease recently, particularly here in Baltimore, and the frequent discussions in various parts of the country as to the cause of the same.

In the report of this case you will notice that after the first twelve hours I did not attach the amount of importance to the temperature that is usual in such cases, though in this case it was unusually high. I do not wish to be understood as expressing the opinion that a temperature of 106° is not a very dangerous height. On the contrary, I consider that it is, and it was *the* symptom I strove to control by a large dose of quinine; but this seemed only to make matters worse by still further weakening an already weak heart, without having any effect whatever upon the temperature. I, therefore, abandoned this line of attack, and concentrated my resources upon strengthening and sustaining the heart. In my experience, all the so-called antipyretics, except antifebrin, which I have not tried, where they have any appreciable or lasting effect upon the temperature, have correspondingly depressed the heart's action, remembering, too, that in this disease an increase of temperature of from 3°–5° is a part of the clinical history, a very important point, I think, in estimating the value of increased temperature in all acute febrile diseases. I feared to risk weakening still more an already weakened heart by pushing antipyretics to the extent I felt would be necessary to bring down the temperature below the danger line.

My own experience has led me to attach much less importance to an elevation

of from 3°–5° of temperature than I formerly did. If this view of an elevated temperature is correct and becomes generally accepted—already it is gaining ground—it must, I think, lead to a change in treatment of this feature in this as in other febrile diseases.

Dr. Loomis, in his article on croupous pneumonia in *Pepper's System of Medicine*, while condemning the use of depressants for the reduction of temperature, claims that quinine is an exception when given in large doses in this disease, for its antipyretic action, reducing temperature without depressing the heart. Dr. Hartshorne, on the other hand, in his recent article on pneumonia, which has attracted so much attention, dissents from this view of the action of quinine in large doses in the treatment of this disease, and quotes Dr. Bartholow, Osler, Jacobi, Emmet, Hoer, Shattuck, Mirol, and others, in support of the same.

The highest recorded temperature, with recovery, in children is said to be 106°–107°, and a temperature of 106° for forty-eight hours renders the prognosis exceedingly unfavorable. In the above recorded case it lasted sixty hours.

Under the head of prognosis, Dr. Loomis says, "Heart insufficiency is the most powerful death-producing agent in pneumonia." Hence, I feel that I have good authority for the course pursued in this case, even had it terminated fatally, which it happily did not occur.

I attach no importance in particular to this case *per se*, as we all know that the worst cases sometimes get well under all kinds of treatment, or even no treatment, and under the worst hygienic surroundings; while others, seemingly mild, with the best of care and favorable surroundings die. It is with the hope that if the generally accepted views with regard to this disease and its treatment for twenty or twenty-five years, as a whole or in part, have been wrong, that such discussions and re-investigations as may reasonably be expected to follow, the reports of such cases may prove beneficial alike to our patients and to ourselves.

REPORT OF A CASE OF OVARIOTOMY.*

BY J. H. W. CHESTNUT, M.D., OF PHILA., PA.

Under the benign influences of antiseptics, the recent progress of abdominal surgery has been so remarkable and the number of ovariotomies has been so considerable, that this case is reported not because of special characteristics, but rather as a further demonstration or exemplification that the operation in question has been removed from the borderland of doubt and has become one of those which the general practitioner, who does surgical work, may, under proper circumstances, essay to perform.

On November 10, 1887, Mrs. J. æt. thirty-seven years, a small woman weighing one hundred pounds, the mother of two children, the younger six years old, consulted me in reference to an abdominal enlargement which occasioned her uneasiness. Her periodical sickness was regular but scanty; she had nausea and was much distressed by frequent and at times ineffectual efforts at micturition.

A careful examination of her abdomen by palpation revealed a tumor about the size of a large apple which inclined from the left to the middle and seemed to be solid. A vaginal examination gave a movable womb, a firm os, and conjoined manipulation assuring me that the case was not one of pregnancy; the uterine sound was used and gave a measurement of 2.7.

Under the impression that the nausea and irritation of the bladder were due to pressure, a supporting bandage was ordered and small doses of thymol (gr. $\frac{1}{3}$th) and ext. belladonna (gr. $\frac{1}{20}$th) were prescribed. On November 20th, I saw the case again; the general abdominal swelling had materially increased, the special tumor was larger; but the nausea and the difficulty of urination were less. After a second examination it seemed clear that the tumor was ovarian, but in the belief that under the circumstances operative measures were not for the time demanded, it was determined to try the

*Read before the Philadelphia County Medical Society, June 13, 1888.

efficacy of medicinal treatment as recommended by Courtey, who sites two well-marked cases of recovery. Chloride of gold and sodium, iron in various forms, iodide of sodium, iodide of potassium, and arsenic, were given internally; to these were added inunctions of iodide of lead, iodide of potash, belladonna, and graduated pressure by rubber bandages. These efforts were successively tried without success. In fact, I am disposed to believe that the methods pursued were rather injurious generally than otherwise.

The tumor enlarged rapidly and the general health of the patient depreciated. On Dec. 6th she had a violent chill ushering in a peritonitis of grave severity, accompanied by great dyspnœa. The peritonitis finally yielded to a large blister 8x8 inches and the internal administration of calomel and opium. After the subsidence of the acute inflammatory symptoms, a persistent nausea with occasional attacks of diarrhœa protracted the convalescence. She was able to go about the house by the middle of January, 1888; but was rarely without dragging abdominal pains, was unable to sleep well, had frequent attacks of dyspnœa, and in consequence of impaired digestion, as well as because of the inroads made on her vitality by the growing cyst, her emaciation became marked. On several occasions a suppression of urine due to pressure on the ureters or on the kidneys was a serious complication; dry cups to the lumbar region and along the groin, followed by hot mush poultices, were effectual in relieving the condition. She declined an operation.

On March 3d a second attack of peritonitis threatened to terminate the case; it was treated by anointing the now large abdomen with oleate of mercury and extract of belladonna, one drachm of the latter to one ounce of the former, and by full doses of opium by the stomach. The patient was able to leave her bed in ten days and agreed to an operation for removal at the earliest practicable time. The preparatory treatment consisted in the administration of syrup of the iodide of iron, the use of Murdock's liquid food, meat juice, milk and milk punch, in addition such table food as she could take. Her digestion was assisted by pepsin in acid solution. The whole body was well rubbed once daily, at bedtime, with a mixture of sweet oil and whiskey, and her belly was anointed once a day with belladonna ointment, which, at least, was a source of great comfort. The bowels, which had become torpid, were regulated by drachm doses of extr. cascara sagrada, supplemented by an occasional enema. The sluggish kidneys were stimulated by dry cupping and by small doses of digitalis, which also exerted a favorable influence on the shortness of breath.

The determination of a limit of necessary endurance may have by some psychological influence stimulated the vitality and so seconded the nursing and feeding that the general condition materially improved without cessation in the progress of the cyst or favorable change as to emaciation. April 11th was the time fixed for the removal of the cyst; the abdomen was then larger than it should have been in a pregnancy at full term; fluctuation could be elicited, but was not so marked as the distended abdomen would have suggested; the face, neck, chest, and limbs were very thin; and the skin, notwithstanding its sedulous care, was somewhat harsh. The direct preparations were simple. On the morning of the 10th a glass of hot lemonade with a teaspoonful of heavy magnesia was given, fasting, and in the afternoon she had a dose of castor oil, followed, after several free evacuations, by one grain of opium. On the morning of the 11th she was well washed, had a bowl of boiled milk for her breakfast, and at eleven o'clock a tablespoonful of brandy and thirty drops of tincture of opium.

The antiseptic measures were a solution of bichloride of mercury 1 to 2,000, used to wash the abdomen; two pounds of a 95 per cent. solution of pure carbolic acid, from which dilutions were made 1 to 30 for instruments and sponges, and 1 to 40 for use within the abdominal cavity; a solution of thymol 1 to 1000 used to spray the abdomen before closing; and some finely powdered iodoform with a good supply of salicylicated cotton.

The kitchen table and a backless chair

completed the arrangements. After the patient was under the influence of the ether, my friends, Dr. A. H. Hulshizer, Dr. W. H. Hech, and Dr. William C. McFetridge, entered the room. Dr. Hech assumed charge of the ether, Dr. Hulshizer assisted me throughout the operation, and Dr. McFetridge took charge of the antiseptic solutions, gave the hypodermic injections hereafter mentioned, and had the care of hot bottles, etc.

The abdomen was well washed with the bichloride solution. After making the usual incision of about three inches through the abdominal walls, opening the peritoneum, and pushing aside a fold of omentum, the wall of the cyst was seen. As was expected, a sound introduced between the cyst wall and the peritoneum revealed extensive adhesions, and the incision was at once enlarged to about six inches. Such of the adhesions as would not yield to the finger (and they were many) were tied with carbolized catgut ligatures and cut close to the cyst. Even after all adhesions within reach had been severed, the tumor seemed barely movable. It was evident that the walls were thick and fleshy in parts, and that the contents of some of the divisions were at least semi-solid. A trocar and canula, with angular attachment for gum hose, was plunged into the most prominent and apparently the largest division low down. After approximating the wall of the cyst to the canula as closely as possible, about a bucketful of thick brown fluid was run off; when the liquid ceased to flow, the sac was pulled out of the cavity as far as possible, a ligature thrown around the opening and tied. The evacuation of and traction upon this cyst enabled me to reach deeper adhesions, which were treated as before, and then a second cyst or cytic division was emptied by the canula. I was then able by persistent manipulation and the severing of other adhesions, to eventrate the mass, the pedicle was pierced by a small flat needle carrying a double carbolized silk thread; each half was tied separately and the ends of the thread brought around the body of the pedicle and tied again. The pedicle was cut about three-quarters of an inch from the ligature; it was well washed, dried, and dropped into its bed.

There remained to see that no oozing occurred, to clean and to close the abdominal cavity. There was almost no oozing. The cavity was carefully sponged out, and an almost hot spray of the thymol solution was thrown in, the folds of omentum which had been wrapped in a hot napkin (occasionally changed) were replaced, and the wound was closed by eight silver sutures, each enclosing the peritoneum. Over the line of incision a moist piece of lint, spread with iodoform, was placed and held in place by three broad strips of adhesive plaster, then a pad of salycilated cotton, and over all a bandage of double flannel. The bladder was emptied and the patient put to bed.

During the operation a hypodermic injection of sulphate of atrophia in a drachm of whiskey was given once when the respiration became alarmingly feeble, and another of a drachm of whiskey alone was given at the conclusion of the operation.

I may note a little misadventure that afterward proved troublesome. One of the hot bottles placed at the patient's side to maintain heat must have slipped for a moment under her buttocks, and been the initial irritation of a bed-sore.

The subsequent nausea was a little obstinate; it continued during the first twenty-four hours, and yielded either to the returning vitality of the stomach, or to the external application of an ice-bag and the internal administration of one-quarter of a grain of cocaine given every three hours for four doses. The nurse was instructed in the use of the catheter, and used it for the first eight days. The diet was restricted for three days to beef-juice with brandy, and oat-meal gruel, with apollinaris water to drink. After the fourth day there being no nausea and no fever (the temperature was never above 100.5°), a gradual return to a generous diet was permitted. The bowels were moved on the sixth day by enema, after a dose of castor oil.

About this time complaint was made of the bed-sore. I found it on the right buttock, with an ugly looking slough,

This slough was cut out, the cavity washed with carbolic acid solution, and filled with finely powdered charcoal, covered with adhesive plaster. It was well washed out daily with a syringe, and refilled until it healed by granulation. This was the only untoward symptom or circumstance following the work. The bowels assumed a regular action, and the bladder, glad to be free from the unwelcome catheter, behaved better than it had done for months. With a good appetite satisfied, the continuance of the sweet oil and whiskey bath daily, and the tonic influence of hope, assured every day added strength to the patient. Four weeks after the operation she went to Salem, N. J., to recuperate further, and I am advised that she is quite well.

In looking over the case, it may be questioned why I did not tap for relief. The temptation to do so was great, but independently of the danger of the procedure, which might have been considerable, it could only defer what should be the termination of the case. Tapping could not even promise with certainty considerable relief, for the fluctuation was not very marked; it might strengthen the patient's disinclination to have the cyst removed, and it was at variance with my opposition to half-way measures after a definite conclusion had been reached. I did not weigh the mass and contents, but I was assured by the patient's husband that the fluid and solid material weighed fifty-seven pounds. After removal the smaller divisions were opened and found to contain a semi-solid brown substance, which could be pressed out. The cyst walls were thick and fleshy in parts, and thin and softened in other parts. My friends agreed with me that the cyst would, at no distant day, have ruptured.

Of such a work it may be said, that the gravity ot possible consequences, the traditions of the past, and the preceding grave symptoms have attached to it a formidable name, and an importance somewhat at variance with the simplicity of its performance and the proportion of good results. The busy practitioner has daily on his lists cases infinitely more obscure as to character, more difficult as to treatment, and less hopeful as to results.

Clinical Lecture.

OPERATION WITHOUT DRAINAGE.—CASTRATION.

(*A Clinical Lecture Delivered at the Maryland University Hospital.*)

BY DR. J. EDWIN MICHAEL,

Professor of Anatomy and Clinical Surgery, University of Maryland.

Gentlemen:—I feel that I am trenching on rather dangerous ground in again calling your attention to the matter of doing surgical operations without that provision for drainage to which we have attached so much importance, and which in many cases is so essential to success. I am convinced that it is much more important to provide for drainage in the cases which require it, than to operate without such provision in such cases as are suitable for such a procedure. Nevertheless, as the scientific surgeon should be guided by definite indications rather than by any hard and fast rules, it is right that various methods of practice should be presented for your consideration, and the indications which call for one or other plan of treatment plainly set forth. Let us inquire for a few moments what is the object of drainage. It is very plain that when we lay a drainage tube in a wound, we do so in order that the fluids of the wound may have free exit, whether those fluids consist of blood, serum, pus, or other matter, which, by being retained, may cause tension or prove a favorable breeding place for the germs of disease. Now there are many wounds which fall under the care of the surgeon in which no care he can take will put the wound in such a condition of cleanliness that some one or other of these conditions will not be present. There may be a quantity of bruised tissues, as in operations after railroad injuries; the tissues in which the operation is done may be infiltrated with pus, or the wound may have become very much soiled before it reaches the surgeon. In all such cases it would be criminal, from the surgical standpoint, to sew up the wound tightly, for it would not only entail considerable suffering on

the patient, but it would also subject him to very serious danger. But, on the other hand, when the surgeon himself makes the wound, and makes it under favorable circumstances, in tissues which are otherwise perfect there are many cases in which perfect occlusion is the best practice, since it shortens the time of convalescence, decreases the trouble of the case, and saves the patient both suffering and time. After what you have heard on the subject, it is perhaps needless to tell you that this plan can only be followed under the antiseptic treatment, and that carried out in its most rigid form. You know that a simple fracture heals perfectly without drainage and without any important amount of fever, and the reason is that in a simple fracture you have the ideal wound. You have a wound that is probably very much lacerated, and accompanied by very considerable effusion, and yet have no fever and no suppuration. The fluids which are effused become organized, the separated parts unite, and the natural state of the part restored. All this is because the wound is in a perfectly aseptic state, which means that it has never been exposed to the air or anything else which could convey to it pyogenic organisms. Now the object of the antiseptic treatment of wounds is to imitate as nearly as may be the condition of a simple fracture. This can sometimes be accomplished by cleanliness alone under favorable circumstances, which would be aseptic treatment; but under the circumstances in which we usually operate it is necessary not only to exercise every care in the way of preventing anything which is surgically impure from touching the wound, but also to make use of certain substances known to have the power of destroying the activity of disease germs, should any reach the part. You are familiar with the method I have adopted for the purpose of accomplishing this end. You have seen the scouring with soap and water, the washing with the solution of corrosive sublimate [1 to 1,000], the use of the same in sponging the wound, the preparation of the instruments by lying in the solution of carbolic acid, and the careful preparation of the hands of myself and those who are to assist me in the operation. In all this troublesome preparation you see an attempt to combine the aseptic with the antiseptic treatment. We put up the mosquito bars and try to kill all the mosquitoes which manage to get through as well. You saw this plan used on an amputation a short time ago, with a brilliant result. I refer to the amputation of the fore arm of the negro who had incurable disease of the carpus. In that case all these precautions were taken, and for fear that the sponges might not be perfectly clean, we cleansed the wound with absorbent cotton exclusively. After the operation was done the wound was sewed up tight, and the result was that it healed up entirely under the dressing which was applied at the time of the operation, the fever which the patient had before gradually subsiding after the removal of the diseased part. I have also had two pleasant experiences lately in private practice, which show the advantages of this method in properly selected cases. In the first case I removed the breast and all the axillary glands in a woman of about forty for cancer. The wound was very extensive, from the axilla nearly to the xiphoid appendix. It was carefully dried, a very important point where complete occlusion is to be used, and sewed up with I don't know how many silver stitches. The temperature stood at about 100° F. for the first two days, after which it fell to normal and remained so. I removed the dressing at the end of two weeks and found it dry, and the entire wound healed without a drop of pus, except at one little point where a suture had broken and a bit of the edge of the wound was everted. The second case was that of a young lady with sarcoma of the breast. It was not necessary in this case to remove the axillary glands, and so the wound was not so extensive. It was treated as in the former case with this exception, that I satisfied myself with twisting a small vessel which should have been ligated. The progress of the wound was very satisfactory, and the temperature scarcely arose above normal. On the tenth day I removed the dressing and found the

wound healed. There was, however, to the axillary side of the wound an evident collection of fluid, and I was somewhat perplexed about it. It happened that on that particular day the patient felt rather badly. She had headache and was a little sick at the stomach. Her temperature was, however, normal. I determined, not, I confess, without some misgivings, to let the fluid alone and await developments. In a few days more the fluid was gone and the wound absolutely healed, and that without one drop of pus. As you know, I have not been in the habit of operating without drainage, but these cases have encouraged me no little, and I propose to-day to venture on this testicle after that plan. The diagnosis of the case is sarcoma of the testicle, and as castration is the only remedy which promises the patient anything we will proceed to do that operation. You see how the part to be operated upon has been washed, shaved and soaked with the sublimate solution, and how we who are to be concerned with the operation have washed and disinfected our hands. I have here also a supply of absorbent cotton to use instead of sponges. The case is a very simple one, so far as the operation is concerned. I shall proceed as if there were a possibility of a mistake in the diagnosis and incise the scrotum. You see there was quite a large quantity of fluid in the tunica vaginalis, as was pointed out beforehand, and the testicle presents every appearance of malignant disease. I now dissect out the gland, with the tunica vaginalis, until it hangs by the cord alone. There is some difference of opinion among surgeons as to whether the cord should be ligated *en masse* or the vessels ligated separately. I do not believe it makes much, if any difference, especially if one ligates with an animal ligature, as I am about to do, though I confess to an unwillingness to ligate vas deferens and nerves unnecessarily. But I have done a good many castrations, and seen many done by other surgeons, some with ligation *en masse* and some by separate ligation, and I cannot say that I have seen that there is any superiority of one plan over the other. So, as you see, I ligate this *en masse* with a strong catgut ligature. Now I sponge the wound well with our solution and sew it up tight with catgut sutures. I must, however, call your attention to two points in reference to sewing the scrotal part of the wound. You see how the scrotum has become wrinkled since I removed its contents, and if you will look closely you will notice that the edges of the wound are distinctly turned in. This is due to the contractility of the dartos, and it constantly militates against union of scrotal wounds by the first intention, so that I do not expect the scrotal part of this wound to heal in that way, though I will do all in my power to cause it to do so. The other point to which I would refer is the manner of sewing up the wound. I regret very much that I cannot at the moment remember the name of the surgeon who suggested the method I adopt, for I like to render honor to whom honor is due. You see, if I simply suture the edges of the wound as is usually done, I leave a cavity of considerable size, which may fill with wound exudations and give trouble. So I run my needle through the edge of the skin on one side of the wound, and also under the surface of the tissues lining the cavity, making a sort of purse string suture and bringing it out through the skin on the other side. In this way the cavity is obliterated by being puckered up. I have only used this kind of suture on one other case, and I was so much pleased with it that I shall probably continue to use it in future. Now that the wound is closed, we give it another good wash with the solution, cover it with a thick pad of sublimate gauze, a layer of oil paper, a thick layer of cotton, and fix the whole dressing with a double spica bandage, and have him put to bed in the hope that he will do us as much credit as the other cases of which I have just spoken to you. He will receive no treatment unless some is indicated, and if his record of vital signs continues good, we will not disturb the dressing for ten days or two weeks.

Society Reports.

ABSTRACT FROM THE MINUTES OF THE BALTIMORE MEDICAL SOCIETY.

MEETING HELD MAY 28, 1888.

ELECTRO-THERAPEUTICS.

Dr. S. T. Earle discussed the above subject, stating that the books up to 1886 are meagre and misleading from a medical standpoint, and it is important for some one working in this field to discuss it in order to bring it more prominently before the profession. He, himself, had been working up the subject and applying with satisfaction his gains in practice. There is no question that electricity is of use in medicine when intelligently applied. The ordinary practitioner fails to get the same results that neurologists obtain because the rules laid down by the latter do not apply to other cases. The greatest advances of late have been made by gynecologists. The greatest advances have been made since 1883, since which time an entire change has taken place in its use. Before then, there were no instruments made for measuring the amount of the current or of resistance. Now we have carefully arranged measures. Up to '83 the strongest current was 30 to 40 milli-ampère—too weak a current to accomplish much good. Then no attention was paid to confining the current to the structure to be acted upon, thus wasting the remedy without accomplishing good. What we now want is to have the electrodes brought into direct contact with the tissue to be acted upon. The negative is the electrode to be used when we wish to destroy tissue—the positive as a hæmostatic in hemorrhoids, etc., but in the destruction of tissue, as in a fibroid, introduce the negative into the tumor and have the positive large, wet, and covering much space. Dr. Earle referred to a patient he is now treating by electricity for stricture of the rectum, of syphilitic origin, with which he is having markedly good results. Formerly another cause of want of success was the indiscriminate use of the galvanic and faradic currents. Each has a definite and specific sphere of action. Galvanic is of use when we want destruction of tissue, or to promote absorption; the faradic, to act on the vaso-motor and muscular system as a tonic.

The kind of interruptions in the current must be borne in mind. The slow interruptions give most pain; the rapid, least. The positive pole gives less pain than the negative. The positive may be distinguished from the negative by the fact that a piece of litmus paper placed under the negative pole shows an alkaline reaction. What we now hope to get good results from is short sittings and a strong current.

DISCUSSION.

Dr. Blake thought the strength of current should be gradually increased to the highest strength required by the addition of cells, and that the poles should not be suddenly withdrawn, but the cells should be withdrawn in pairs of five or ten at a time. Serious results have followed sudden withdrawal.

Dr. Ellis asked Dr. Earle whether in his case of stricture of the rectum, he did his whole duty to his patient by withholding internal treatment.

Dr. Earle replied that there was no other evidence in the patient of syphilis than the stricture, which was of long standing,

THE SURGICAL ASPECT OF INTESTINAL OBSTRUCTION.

Dr. Michael discussed the above subject.

Case I.—A girl, aged 14, with history of obstruction of the bowels. The belly was opened, and an ulcer, perforating the vermiform appendix, was found. The patient died.

Case II.—A man, aged 40. The obstruction came on gradually. It was met with 8 or 10 inches up the rectum. Four or five days before the operation, the small intestines were found empty and flaccid; the colon was greatly distended; there was a stricture in the sigmoid flex-

ure, but the principal obstruction was lower down. The gut ruptured on examination, and feces escaped into the peritoneal cavity. Colotomy was performed, the belly washed out, and the wound closed. The patient lived twenty-four hours. Post-mortem revealed nothing.

Case III.—A woman. It was similar to the second case. There was a small amount of fluid retained in the bowel from enemas. The small intestines were flaccid. There was a stricture of the sigmoid flexure. An artificial anus was made, the discharge through which was natural. Death occurred on the fifth day.

Case IV.—Male, aged 45. Experienced sudden pain on exertion; vomited. Saw him on third day. Obstruction in small intestines, which were distended. (*Keep the guts in the cavity* in all cases, *if possible.*) Bands of adhesion were found which broke under handling,and relieved the gut above. Gas escaped from the bowels. There was a passage from the bowels the next day. Fecal vomiting came on later. Post-mortem examination revealed bands of adhesion, which escaped notice during the operation. These were caused by typhoid fever years before.

These four cases all died.

Case V.—Attempted to purge with oil, etc. No movement for twelve days. Injections passed out uncolored. Another injection, given by the narrator himself, the patient being in knee and chest position, from a quart to half a gallon of suds was thrown up, the belly being kneaded as the injection was given. It returned without odor apparently. Closer examination disclosed a fecal odor. A natural movement followed. The patient recovered.

Case VI.—No movement over a week. Large injections, with a long tube, were given. Recovery followed.

Case VII.—Obstruction of a week's duration. Pulse bad. As condition of patient was hopeless, did nothing. Patient died on third night.

Case VIII.—Similar to seventh. The trouble lay in right iliac fossa. Patient died.

Cases should be operated upon as soon as diagnosis of obstruction can be made out. The cases that begin suddenly are those that require operation, and the operation should be done as soon as a positive diagnosis of obstruction is made, first using milder means, but not to delay operation until the case is hopeless. Those that begin suddenly with intense pain of a colicky nature, referred chiefly to the umbilical region, are the ones that require most the operation. He thinks laparotomy not as dangerous as the large enemas from force pumps recommended by some. A tube can be passed very high up, and will relieve some cases of fecal obstruction by breaking up the mass and allowing it to pass in smaller pieces.

DISCUSSION.

Dr. Blake said he had seen a case of intussusception in which he could see the intestinal movements through the abdominal walls. Surgeons refused to operate, and kept the patient alive six weeks on milk, beef tea, etc. Dr. Blake said he had passed his hand, and arm as high as the elbow, up the bowels of patients while they were under chloroform, and he thinks obstructions low down may be detected in that way. He had seen cases of suppurative peritonitis which were entirely without fever, but with rapid and weak pulse, in which it was impossible to get a movement of the bowels, though there was no mechanical obstruction. In these he thinks the constipation was due to paralysis of the intestines.

Dr. J. W. Chambers thought it strange that at this late day any one should question the advisability of operative interference in such cases. It is criminal to refuse it, and in most cases it is due to want of moral courage on the part of the surgeon. The rule is that such patients die and recovery is exceptional, yet physicians work on the exception and not the rule. Two-thirds of the cases of obstruction are damaged by injections or cathartics. One-third of all cases of obstruction are due to invagination, and only in such cases could injection be of any service. In such cases

purgation is damaging, and injection damnable. Even the too liberal use of opiates obscures the case, and is, therefore, objectionable.

Dr. Reynolds said he does not so utterly condemn injections as Dr. Chambers does, for he has seen them do good. He related the case of a man who, while engaged in some domestic act, was taken with severe pain in the abdomen, of a colicky nature, who vomited stercoraceous matter, had great tenderness, and was constipated. Injections were given, but failed to produce any movement. Finally, he determined to give an enema himself, which he did on the fourth or fifth day with a Davidson's syringe. The fluid did not return for half an hour, but when it did it brought a large fecal movement, and the patient rapidly recovered. He advises the conservative injection in certain cases, as Dr. Michael does.

HENRY B. GWYNN, M. D.
Rec. and Rep. Secretary.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING JUNE 13, 1888.

The President, J. SOLIS-COHEN, M.D., in the chair.

Dr. J. H. W. Chestnut read the

REPORT OF A CASE OF OVARIOTOMY.*

DISCUSSION.

Dr. G. G. Davis. I wish to take exception to the preliminary remarks of the reader, that his case demonstrates that it is right for the general practitioner to undertake this class of operations. I hold that no one should open the abdomen unless he is prepared for whatever may be found, and we know that the most experienced operators tell us that they cannot be positive, in advance of incision, of the conditions that they will meet with. It may be as here, a very simple matter, or it may be a very serious one. Only those who have had a certain amount of preliminary training and are prepared to follow up the operation by the most radical procedures, if necessary, should do these operations. One case cannot be considered as establishing a principle.

Dr. Goodell. There is one point I wish to call attention to in connection with this graphically detailed picture of an ovariotomy, and that is the danger of having sloughs produced by hot water, to which the author has alluded. In a case of oöphorectomy for fibroma, of which I was cognizant, the flannel in some way became probably displaced from the hot bottles and two severe burns of the heels were caused, the recovery from which was more tedious than from the operation. One other little point. It is a mistake to introduce the trocar at the lower angle of the wound; for as the cyst empties, it collapses, and may slip off from the trocar. The rule is to introduce it at the highest angle of the wound, so that it may have room to travel down with the collapsing cyst.

Dr. Chestnut. The case was not presented as a single one to establish a rule, but as an additional illustration to the many on record, that under antiseptic precautions and under proper circumstances, the general practitioner, who has confidence enough to do surgery at all, may also do an operation like the one reported.

*See page 243.

PHILADELPHIA CLINICAL SOCIETY.

STATED MEETING HELD APRIL 27, 1888.

The President, DR. MARY E. ALLEN, in the chair.

Dr. Clara Marshall read a paper, entitled,

A REPORT OF TWO CASES OF CHOREA OCCURRING DURING PREGNANCY.

CASE I.—Sallie M——, æt. 18, single; menses established at the age of 13, and always regular. Chorea was developed

at the age of 10, increasing in severity (though to a more marked extent during pregnancy) until the time of her admission into the wards of the Philadelphia Hospital, in March, 1883.

She attributes the chorea to mal-treatment at the hands of a relative, who was her care-taker. At the time of her admission into the hospital, the choreic movements were intent to the last degree, the patient not having the slightest control over herself, and the movements being sufficient to prevent her remaining in bed without restraint.

As the patient was pregnant, the advisability of terminating the gestation was considered; but finally she was transferred to the nervous wards, where, under the care of Dr. Clarke K. Mills, she slowly, but decidedly improved. The treatment while in the nervous wards consisted in the administration of antispasmodics and tonics. A combination of potassium bromide, with conium juice and liquor potass. arsenitis, was the principal medication.

Careful attention was also paid to the diet, and stimulants, chiefly in the form of milk punch, were given.

The choreic movements were not present during sleep. The patient claims that she was not conscious of being brought to the hospital, and that she did not recover consciousness until after she had been transferred to the medical wards. She was returned to the obstetrical wards June 7th, 1883, at which time the choreic movements had almost ceased, and in this respect she remained in about the same condition until delivery. She was delivered of a child weighing 5.8 pounds, June 24th, after a normal delivery. June 30th, patient's general condition good; bowels regular; tongue clean. Her hands she keeps perfectly still, except when attention is called to them, when they twitch slightly. She sleeps well; is taking no antispasmodics.

The lying-in period was normal, the convulsive movements disappearing entirely. She left the hospital in due time; taking her baby with her. November 24th, 1885, Sarah M. was again admitted with her second baby, æt. 5 days; no chorea. She was discharged December 24th, 1885, at which time mother and child were in good condition.

Case II occurred in the practice of Dr. Laura Hulme, of West Chester.

W. I., æt. 24; married; three children; youngest three months, oldest three and a-half years. The chorea dates from the first pregnancy, lasting through each pregnancy, with slight improvement after delivery. The second delivery was a breech presentation, with a still-born infant. No improvement followed this second delivery, as she soon became pregnant for the third time. There was, at this time, much nausea, which prevented the retention of medicines by the stomach. She could not stand alone, and walked with great difficulty. Her arms and hands went through certain irregular movements before she could use them to carry out her wishes. The tendon reflexes were exaggerated; pupils responded normally to light; appetite good; bowels regular; no albuminuria. She was delivered in July, 1887, (the labor being short and easy), after which she began at once taking ext. cimicifuga fld. ʒ iij–ʒ iv. a day, upon which she steadily improved. She could walk very much better, but was not quite steady upon her feet; had to make several ineffectual attempts before being able to coördinate her movements. She continued to improve under the administration of cimicifuga.

Her speech, which was much impaired when first seen, soon lost this feature, except occasionally; the facial movements began to be slight and ceased to be constant; uterus and appendages normal; heart's action regular; no sensitive point on spine; the insomnia disappeared, as well as the twitching during sleep.

It might be stated here that, although there was no history of chorea previous to marriage, yet the patient had always been very nervous. Different remedies were tried in the case—hyoscyamus and Fowler's solution being the principal ones. Nothing seemed to benefit until cimicifuga was tried.

As to the causes of "chorea of gestation," Barnes says that "it is doubtful whether chorea arises in the course of gestation, as a new disease." In case

first it was a disease of childhood (partly aggravated by gestation). In case second it first manifested itself during pregnancy, though the patient was of a nervous diathesis, which is insisted upon by Barnes as a foundation for chorea of gestation, where there has been no chorea of gestation. Since chorea involves danger to life of child and mother, the question of terminating the pregnancy comes up, (especially in the interest of the mother). Nature often solves this problem, and sometimes, even then through procrastination, the mother's life may be lost.

Barnes reports nine (9) fatal cases, in five (5) of these premature labor set in spontaneously; in four (4) it was induced. Besides medication and induction of premature labor, dilatation of the cervix uteri has been tried by Dr. W. F. Wade, Physician to General Hospital, Birmingham, England.

In this case potass. bromid., tinct. valerian, chloral, cannabis ind. were tried, without avail. Finally, dilatation of the cervix was resorted to, under chloroform. The amount of dilatation was 2½ inches. This was followed by steady improvement, there remaining only a slight twitching of the right fingers and a little fidgetiveness when watched, which disappeared after the birth of the child.

Chorea may end in mania or melancholia, but even then the case is not always hopeless. A case, under the care of Dr. Charlton Bastian, is entitled "Chorea during pregnancy; semi-maniacal attacks, melancholia; recovery under the use of opium." In this case chloral and the bromides had been used and found valueless.

Mary Willits, M. D.,
1527 Green St. Rep. Secretary.

Tannin for Burns of the First Degree. — Mikalsky uses tannin in burns of the first degree, as follows:

Tannin,	
Alcohol . .	āā ʒ 1
Ether sulphuric. .	ʒ 7½

For local application.—*Revue de Thérapeutique*, May 1, 1888.

The Crede Method of Treating the Placenta.—At the late Wiesbaden meeting of the German Naturalists and Physicians a number of excellent papers were read before the gynæcological section. Among other things, Credè's method came up for discussion, and Freund, Dohrn and Ahlfeld criticised it somewhat severely. In the last number of the *Archiv fur Gynakologie*, Cr dé defends his method against the attacks of his critics and makes short work of their objections. He maintains that the fundamental principle of his method is theoretically correct, has stood the test of experience, and has never been assailed; that the objections urged against it have been directed against secondary and unimportant details, and that some of the improvements suggested are not at all new, being already contained in his method, and those which are new are not worth anything. He concludes by saying that his method remains unchanged in its fundamental idea as well as in its subsidiary parts, and has suffered no loss of any consequence through the repeated attacks made upon it, and that there is no occasion to accept any one of the changes that has been proposed up to the present time.—*Montreal Med. Jour.*

Compressed Air in Pleurisy.—Dr. Joseph Szohner, of Visegrád, gives in a Hungarian journal an account of some cases of pleurisy with effusion, in which the compressed-air treatment appeared to exercise a most salutary effect. The patients were ordered two sittings daily. In one of the cases, where the pleura had been nearly full of fluid, which the patient refused to have taken away, it made an opening for itself, and, in spite of all that could be done, the man seemed to get worse and worse, a large cavity forming in the apex. The compressed-air treatment was then resorted to, the drainage and irrigation of the cavity being of caurse attended to; and after a couple of months convalescence was completely established.—*Lancet*, July 14, 1888.

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BALTIMORE, JULY 28TH, 1888.

Editorial.

TREATMENT OF WOUNDS BY CONTINUED IRRIGATION.—*The British Medical Journal* (July 14th, 1888,) calls attention to the method of treating severe wounds by long continued irrigation, and describes a permanent apparatus now in use in the London Hospital. A large tank is fixed in the wall; is supplied with hot and cold water by pipes; a window in its sides shows the level of the water and exposes a thermometer, by which the temperature of the water is adjusted. From the tank irrigating tubes pass to different beds, and the water is drained off by a pipe which passes to the basement below. Irrigating tubes are passed through the wound to be treated, and the passage of the water through the tubes is kept up as long as may be necessary. Reference is made to a case in which a stream of water has been running over a severe wound of the elbow, produced by a crush, day and night without intermission for nearly three months. In the same journal of July 7th, 1888, Mr. Treves describes the method above referred to, and reports a case in which a stream of water ran through a patient's knee-joint, without a moment's cessation, for a period of thirty days. Cold water was employed, to which was added a minute quantity of corrosive sublimate, carbolic acid or boracic acid. The effect of this plan of treatment Mr. Treves found very pronounced. It relieved pain, reduced temperature and swelling, and promoted resolution.

Mr. Treves reports the following case which fully illustrates his method of using continuous irrigation in joint troubles:

"The case was a simple one of acute suppuration following injury. The patient, a stoker, a vigorous, healthy man, aged 23, was admitted into the London Hospital on November 7th, 1887, with acute synovitis of the right knee-joint.

On November 1st he had fallen and had received a violent blow upon the knee. He was disabled and was taken home. The joint did not become visibly swollen until the evening, some hours after the accident. There was no wound. The patient had never had any previous joint trouble, nor, indeed, any notable illness.

When seen on admission the patient appeared ill, and was much worn out by pain and want of sleep. The right knee-joint was a little flexed, was extremely distended with fluid, and was the seat of great pain. The skin covering the articulation was red and œdematous, and the œdema had extended some little way beyond the joint district. The temperature was 100°F. The case was evidently one of suppurative synovitis. The limb was fixed upon a straight back splint, and the joint was opened by two lateral incisions, each about one inch in length; through the incisions escaped much synovial fluid mixed with pus and flakes of lymph. A drainage-tube was passed through the joint underneath the patella, and the irrigation apparatus was adjusted precisely as in the case already detailed. Cold water containing a little boracic acid was allowed to run through the joint without intermission night or day for one month. The temperature became normal the day after the operation, and never rose again above 99° The patient was at once quite easy.

The tube was removed on December

8th, and was replaced by two short tubes for either incision. On December 17th all drains were left off, and the splint was removed. There had been no rise of temperature, no suppuration, and no sign of a relapse. The wounds were now (December 17th) quite healed, and passive movement was commenced. The patient left the hospital on January 8th.

In the following month I exhibited the patient at the Harveian Society. His recovery had been complete. The patella was quite movable, and he could execute a complete range of movements with the right leg; indeed, there was no appreciable difference between the right limb and the left, except that the former presented two cicatrices.

The treatment advocated is exceedingly simple, and would appear to be efficacious. In my previous experience of other methods of treatment I have never seen complete restoration of function to follow an acute suppuration of a large joint."

THE ARTIFICIAL FEEDING OF INFANTS.—At this season of the year the attention of a large number of physicians is concerned in the feeding of infants, and it becomes a serious question what food shall be given them. Were it possible for all infants to obtain their food from the mother's breast, a large saving in infantile mortality would result, but, as a matter of fact, the majority of infants in all large cities are brought up on artificial food on account of its ease of administration, or because the mother is physically unable to nurse her own offspring. Various attempts have been made to supply an artificial food which would approximate the quality and character of human milk, but as clever as many of these foods are they cannot wholly supply the place of the mother's breast.

Attempts have been made to substitute the milk of other animals, but certain practical and economical questions have presented themselves as objections to the milk of the cow, goat and ass. Cow's milk is an indifferent substitute for human milk for several reasons. It is not easily digested by the infant's stomach, owing to the superabundance of casein and its acid reaction. The dilution with water, addition of sugar and alkalies to bring it up to the standard of human milk, usually have the opposite effect, and the milk is deteriorated rather than improved by the manipulating processes through which it goes. But the strongest objection to the use of cow's milk is the fact that it may harbor the bacillus tuberculosis, and thereby spread havoc among the large number of infants that consume it. The cow is remarkably prone to bovine tuberculosis, which is identical with the same disease which attacks the human race. The prevalence of tuberculosis among cows is much greater than has been supposed, some veterinary surgeons placing the mortality at 50 per cent. Whilst it has not been proven that tuberculosis has been communicated from the cow to man through milk, there is no proof that it has not, and we may assume that the milk of the tuberculous cow is not a fit article of food for infants or adults. The poor of all large cities must buy cheap milk, as they buy inferior meats, vegetables and bread. It would be difficult to estimate the large mortality among these poor children from the use of such milk as is given them. It has been argued that boiling the milk destroys all germs, and that it may afterwards be kept sterilized by proper precautions. Careful attention to such details is not likely to be given, and there seems no better corrective for the evil spoken of than stringent sanitary regulations to ensure the purity of milk. This has been attempted with fairly good results in several cities, but with admitted difficulties. Recently Dr. Richter has called attention to the superior quality of goat's milk as a substitute for cow's milk, and he has undertaken to show that the goat is the only animal that can compete with the cow in furnishing a food for infants. He argues that the goat is easier to keep and less expensive than the cow, and is rarely af-

fected by tuberculosis. An analysis of goat's milk shows less casein and more albumen. It is more easily digested by infants than cow's milk and far better adapted to their wants. Dr. Richter argues from these facts that the goat should be introduced into all large cities, as a substitute for the cow. This, he claims, will correct many of the abuses which now regulate the supply of cow's milk, and thereby furnish better nutrition for infants and adults.

Influence of Removal of the Uterine Appendages on the Sexual Appetite.—One of the results of scientific progress is the almost daily overthrow of traditional opinions and the substitution of facts for theories. At one time the removal of the ovaries and testicles, it was held, destroyed all sexual feeling in the sex thus deprived of these organs. It is now known that such is far from being the invariable fact, and that so many exceptions occur as to destroy the popular belief upon this subject. Mr. Tait, whose opinions should carry weight, on account of his extremely large and varied experience, read a paper at a recent meeting of the British Gynecological Society, in which he pointed out the fact that the uterine appendages had as little to do with the sexual appetite in woman as the front teeth. He had seen a number of cases of women whose ovaries had been removed while they were yet virgins, and in whom no lack of the sexual appetite was experienced. Still, quite as remarkable was the evidence he had obtained from three virgins in whom the uterus, ovaries and tubes were removed without an influence upon the sexual desire. He argued that in man the sexual appetite has not its seat in the testicles, and in the woman not in the ovaries, tubes and uterus. He could find no facts to support the generally accepted view upon this subject, and believed it was based upon a false analogy.

The sense of mutilation, which many young women have experienced after the removal of their ovaries, is probably based upon a misconception of the function of the ovaries. Many such cases are practically sterile before a removal of these organs has been undertaken, and they are thus deprived of organs which have no sexual value.

Miscellany.

Infertility in the Male.—Infertility in male may be due either to azoospermia (absence of spermatozoa) or aspermia (absence of emission.) The product of emission consists, as is well known, of a mixture of three secretions, from the testicles, the seminal vesicles, and the prostatic glands. Dr. Fuerbringer has remarked that the testicles only produce motionless spermatozoa which become animated on admixture with the prostatic secretion, the importance of which as a factor in sexual importance has been generally overlooked. According to some recent observations the prostatic glands secrete a milky, but non-viscid liquid, holding in emulsion a number of globular bodies, half the size of red blood corpuscles, and composed of lecithin. It is this secretion that gives the characteristic odor to the seminal emission, the other constituents being devoid of smell. The stimulating effect of the prostatic secretion is only exercised on viable spermatozoa, and it has no influence on those which for one reason or another are "dead." In several cases of young men whose semen contained these motionless spermatozoa, the latter became active enough on the addition of some prostatic secretion, the defect being thus evidently due to a want of it. Azoospermia proper is very rare, and when present is due either to atrophy of the secreting organs or occlusion of the vas deferens consequent on double epididymitis or gonorrhœal funiculitis. This affection no treatment can relieve, but aspermia, depending as it often does on stricture of urethra, may be cured by removal of the stricture.—*Medical Press*, June 27, 1888.

Digital Dilatation of the Pylorus.—Loreta's operation for stricture of the pylorus has been (*New York Medical*

Record) successfully performed by Dr. William T. Bull at St. Luke's Hospital, New York. The patient, a man, aged 37, had suffered for twenty months from symptoms which enabled Dr. F. P. Kinnicult, after careful chemical examination of the fluids in the stomach, to make the diagnosis of pyloric stenosis from cicatricial contraction of an ulcer. At the operation the pylorus admitted only a bougie of the diameter of three-sixteenths of an inch. Through a wound two inches long the pylorus was gradually streched with bougies and the fingers till it was open two inches in diameter. No bad symptoms followed the operation and at the date of the report June (19th) the patient was considered out of danger, and had begun to take considerable quanities of liquid diet by the month without subseqent pain or vomiting.—*Boston Medical Journal* July 7, 1888.

Antipyrin and Spirit of Nitrous Ether.—Eccles (*Pharmaceutical Record*) again calls the attention of druggists and physicians to the incompatibility existing between antipyrin and spirit of nitrous ether, and the great danger to life from their combination in a prescription. Because of this dangerous incompatibility not being generally known, and their having similar febrifuge properties, they are occasionally prescribed together. At least one person —a child— is known to have lost its life through this combination. Antipyrin possesses basic properties and forms salts with many acids, among which are nitrous and acetic, both of which acids either exist in the spirit of nitrous ether of the shops, or are produced in neutral solution through the action of the water used as a vehicle in the receipe. The union of antipyrin and nitrous acid forms a crystalline, greenish-colored substance, called isonitroso antipyrin, a very poisonous compound.—*Polyclinic.*

The Treatment of Gall-Stones.—Rosenberg, at a recent meeting of the Berlin Medical Society, stated that upon an American suggestion he had treated with large quantities of olive oil a patient, who, for five years had suffered with attacks of nephritic colic, and had in vain used the most various remedies. The patient took on several evenings, without marked discomfort, from 3 to 5¾ ounces of olive oil, followed by some Cognac, and after the first dose passed 3 calculi, after the second, 243. In all, 26½ ounces of olive oil were taken, in five doses, and 629 calculi counted in the stools; subsequently to which the gall-bladder, which had previously extended markedly beyond the margin of the liver, could be no longer palpated. According to the views of American physicians, the usefulness of the olive oil depends upon its entrance into the gall-bladder and softening the calculi.—*Wien. medizin. Presse*, May 20, 1888.

Scrofulous Neck and its Treatment.—Gibb ("Glasgow Med. Jour.," Jan., 1888) draws the following conclusions from his observations and researches regarding scrofulous neck:

1. In scrofulous disease of the cervical glands we have a tubercular process of a mild type, seldom leading to generalized infection, but perhaps occasionally doing so; frequently concerned in predisposing to or even directly occasioning phthisis pulmonalis; and in the majority of cases deteriorating the general health.

2. Tubercular disease of the cervical glands is too often allowed to go on to a disastrous extent without any active steps being taken to arrest its course, largely from a prevalent indifferent and helpless feeling on the part of the medical profession.

3. Slight cases, being of course offered every possible advantage in the matter of constitutional treatment, should be carefully watched, and if, after the lapse of months, or it may be a year or two, we find the disease spreading, it is wise to extirpate the affected glands while they are yet movable. In such cases the operation will be easy and little or no deformity need result.

4. Surgical interference is demanded whenever a sinus resulting from a degenerated gland exists, whenever pus can be detected in connection with a gland, and whenever there are enlarged glands

accessible to surgery in a patient in whom a caseous or suppurating gland has already been discovered. — *New York Medical Journal.*

Treatment of the Umbilical Cord. —Dr. Ph. Ph. Fagonski publishes in the *Vrach* some observations on the different methods of dressing the umbilical cord after it had been tied. He employed four different methods in a hundred cases each: in the first series gypsum, in the second talc, in the third Runge's mixture (salicylic or boracic acid with potato starch), and in the fourth hygroscopic cotton-wool. In the first series erythema and intertrigo occurred five times, ulceration around the umbilicus four times, slight hæmorrhage from the cord seven times, and slight suppuration twice, dry gangrene or mummification of the cord occurring in every case. In the second series ulceration occurred five times, slight hæmorrhage ten times, suppuration forty-eight times, moist gangrene thirty times, and dry gangrene seventy times. In the third series erythema and intertrigo were noted three times, ulceration twice, hæmorrhage eight times, suppuration fifty-one times, moist gangrene sixty-five times, and dry gangrene thirty-five times. In the fourth series erythema and intertrigo occurred twice, ulceration three times, hæmorrhage four times, omphalitis followed by death twice, suppuration twenty-nine times, moist gangrene twenty-eight times, and dry gangrene seventy-two times. With regard to the time of falling off of the cord: in the first series it was usually on the fifth day (never later), in nineteen cases on the fourth, and in four cases on the third day; in the second series separation occurred in the majority of cases later than the sixth day, in six cases only being on the sixth day, in four cases on the fifth, and in one case on the fourth; in the third series the cord fell in four cases on the fifth day, and in the remaining ninety-six cases after the sixth; in the fourth series it fell on the fourth day in one case, and after the sixth in the remaining ninety-nine. It will thus be seen that the safest and best of these dressings is gypsum, but it must not be applied too liberally, for it is quite possible for it to set up erythema. Dr. Fagonski recommends that all cases should be dressed simply with 10 grains of gypsum on cotton wool.—*London Lancet*, July 14, 1888.

The Use of Kephir as an Infant Food.—Dr. H. Longstreet Taylor (Archives of Pædiatrics, May, 1888), after observing the use of kephir at Prof. Freund's gynæcological and obstetrical clinic in Strassburg, and finding peptonized milk and malted foods unsatisfactory, tried kephir, during his five months of service at the Home for the Friendless and Foundlings, among the atrophied children. He claims not to have had a single death from marasmus, but he does not relate how many cases he had under his care. He says that the kephir fermentation breaks up the caseine into flocculent particles, changes the albumen into peptones, and the sugar of milk into lactic acid, alcohol, and carbonic acid gas. A few children refused to take the food. To those who would, from four to six quarts were taken daily. The first effect was a diarrhœa, which emptied the bowels of partly digested material. This was followed in a few days by normal stools. The skin became less harsh and the abdomen less prominent, appetite improved, and kidneys were more active. Increase in weight was slow. When the body filled out, kephir was stopped and other food given. It should not be used if over a week old, and, to infants over a month, should be diluted one-third; in older children, less dilution. In children over a year old, other food may be given in addition. Any physician who has had experience in a foundling asylum or nursery knows how difficult it is to obtain good results with the puny, atrophied infants that are sure to come under his care. If kephir is superior to koumiss, as is claimed, and will answer when peptonized or malted foods will not, it will be a valuable aid to recovery.—*Brooklyn Med. Journal.*

Tar Water in Hemorrhage.—Dr. Corneille de Saint Marc finds that dis-

tilled tar water has a hæmostatic effect very similer to that of hamamelis. When prepared with the tar of pine wood it has valuable tonic astringent properties. It may be administrated in quantities of from 10 to 15 drachms, during the twenty-four hours, in congestive pulmonary hemorrhage, and in hemorrhage of the uterus and kidney. It arrests the hemorrhage of the first stages of phthisis with remarkable promptitude.—*Lancet*, May 12, 1888.

M. Charcot and the Emperor of Brazil. — Sometimes, says our Paris correspondent, doctors are properly paid for their services, as witness the case of Professor Charcot, who was called over to Milan to see the Emperor of Brazil. It was a two days' service. Milan is twenty-four hours from here, and Dr. Charcot was paid 40,000 francs—say $8,000; $2,000 a visit is not bad, even for a Charcot.—*New York Medical Journal.*

Leprosy in Russia.—Leprosy is said to be spreading in the Baltic provinces. In Lithuania there are at the present time from 250 to 300 lepers, while in the Dorpat district it is said there are as many as ten lepers in every thousand of the population. There is, however, reason to believe that this estimate is exaggerated. A leper-house capable of accomodating forty patients has been opened at Riga, and steps are being taken for the appointment of a commission to inquire as to the best means of checking the spread of the disease.—*British Medical Journal.*

Digitalis as a Diuretic and Laxative.—Huchard, in the *Revue Gén. de Clin. et de Thér.* of April 12, 1888, gives the following formula for a laxative powder containing digitalis:

Potass. sulphat.,		
Potass. tartrat.,		
Potass. nitrat.	.	āā gr. 90.
Fol. digital. (pulv.)		gr. 15.

In twenty powders.
One powder three times daily.

A Convenient Formula for the Treatment of Tape-Worm.—Oil of male fern may be conveniently administered in the following combination:

Ethereal oil of male fern	.	♏ 45.
Tinct. vanillæ	. . .	♏ 45.
Syrup rubi.	. . .	ʒ 6ss.
Gum. acac. pulv.	. .	gr. 30.
Aquæ destill.	. . .	ʒ 6ss.

To be taken at one dose, in an equal quantity of milk. Castor oil should be taken two hours afterward.—*L'Union Médicale*, May 10, 1888.

Paraldehyde in Obstinate Vomiting.—Dr. U. D. La Mours has used it in ovarian irritability with sympathetic stomach disorder, in vomiting of pregnancy, and in the distressing nausea of migrane, with the most gratifying results. The formula employed is as follows: ℞ Paraldehyde, m. xl; elix. simp., ʒi. M. S. One tablespoonful in a little water, repeated in half an hour, if required. This small dose in its effects is not hypnotic, acts as a sedative not only upon the mucous membrane of the stomach, but also has a tranquilizing effect upon the whole system. But few doses are usually required. The only objection to its use is its disagreeable odor.—*Albany Med. Annals*, June, 1888.

Hypodermic Injections in Malarial Attacks.—Dr. Loysel recommends the following formula for hypodermic injection in malarial attacks: Liq. arsenicalis, ♏ 50; quiniæ sulph, ʒss; and tartaric acid q. s.; aqua destillata, ♏ 190. Injection for leucorrhœa—Potassium chloratis, 200 grs.; vin. opii, ʒiij; aqua picis (tar water), ʒviij. — *London Medical Recorder*, May 21, 1888.

Prescription for Headache.—Dujardin-Beaumetz recommends the following: ℞. Caffeine, gr. iv; salicylate of sodium, gr. iv; hydrochlorate of cocaine, gr. iss; water, fʒij; syrup, fʒvss. M. Take the whole at one dose at the beginning of the attack.

Medical Items.

The Texas Medical College, though not endowed, announces that it has funds guaranteed which will enable it to exact three years' study and three full courses of lectures of its graduates.

Dr. Carl Kilcher, assistant at the pathologo-anatomical department of the University at Prague, died recently of blood-poisoning, a result of the inoculation of blood from a typhus fever patient for scientific investigation.

The increase in deaths from Bright's disease in Massachusetts is very striking. In 1850 the mortality rate was 1.1 per 1,000 of total deaths. In 1860 the ratio was 2.9 per 1,000; in 1870, 10.5; in 1880, 19.7; and in 1886, 30.5. The Massachusetts kidney seems to be losing its resistive power.—*Med. Record.*

Dr. Decaisne, a French physician, contends that excessive smoking, and especially upon an empty stomach, is a frequent cause of vertigo. Lagneau adds that if vertigo exists in a smoker, it may be ascribed to the tobacco, when, in fact, due to congestion of the brain. —*Polyclinic.*

We are now in the midst of mid-summer, and medical work is exceedingly dull in this city. A large number of physicians are away on their summer rest. Those who for various reasons are compelled to remain at home have comfort in the reflection that they are not "overworked."

General Sheridan's case has, it is universally admitted, been brilliantly managed by his attending physicians. There is some satisfaction in finding that a case which has been so conspicuously before the public is one that illustrates the resources of our art. Certainly, if it were not for medical skill, including not only careful nursing but the use of powerful drugs, General Sheridan would not have lived so long as he has done.—*Med. Record.*

The city of Mexico is said to be the paradise for quack practitioners, male and female. We once thought Baltimore enjoyed this exclusive honor, but now that we have a State law—which one of these days will be enforced—the quacks have deserted us for a more hospitable location. Perhaps many of them have gone to Mexico, as our neighbors have established a wall of protection against them. When they leave Baltimore we know of no other stopping place for them this side of the Rio Grande.

The committee appointed by the Berlin Medical and the German Surgical Societies to take steps for the erection of a memorial to Bernhardt Von Langenbeck, has just issued an appeal for subscriptions. The memorial is to be in the form of a building, the "Langenbeck-haus," which is intended to be a home for all medical associations, and a place for scientific gatherings. The names of the late Emperor Wilhelm I and his Empress Augusta stand at the head of the subscription list, and it was the Empress who suggested that the memorial should be a building rather than a statue of the illustrious surgeon.—*Br. Med. Jl.*

At the last meeting of the Academy of Sciences, the president, M. Janssen, informed his colleagues of the infirm state of health of M. Chevreul, the illustrious *savant* and centenarian. He is becoming gradually weaker, and is often obliged to lay up. He is still able to walk, but is obliged to make great efforts to get upstairs. He is, therefore, not so regular in his attendance at the Academy.—*Lancet.*

Under the fostering influence of the ethical rules laid down by the American Medical Association, there is growing in the West a practice of physicians advertising themselves as specialists in the medical journals. One gentleman who edits a journal takes half a page in his own and other journals to announce that he is professor of diseases of the mind and nervous system, with various peculiar qualifications for treating such diseases. "Terms reasonable—reduced rates, if necessary."—*Med. Record.*

A French authority contends that leucocythæmia is a true cancer of the blood. From the permanence of the changes and generally malignant character of the disease, he judges it to be, unlike leucocytosis, not a symptom, but a distinct pathological entity. These and other characteristics ally to it the carcinoma of other tissues. That no tumor is formed is explained by the nature of the tissue—for the blood is a liquid tissue—that is attacked.—*Polyclinic.*

At a recent meeting of the Societé Francaise d'Hygiène, Dr. Moreau de Tours read a communication that he had already made to the Congrès des Sociétés Savantes on the relations of pulmonary phthisis to mental alienation or insanity, from an etiological point of view, and he arrived at the conclusion that "phthisis in parents may, by virtue of the law of heredity be transformed, disappear in their children and be replaced by a mental or nervous affection."

The Medico-Chirurgical College of Philadelphia was organized with a three years' obligatory course, in 1881. In the annual announcement for 1887-8, owing to a strong pressure which was brought to bear upon the faculty for the better recognition of the rights of preceptors, a modification was made by which the student was allowed to spend the first year with his preceptor. Syllabi were furnished by the college to direct this year's studies. If the student then succeeded in passing the examinations of the first year, he was admitted to the next class. A year's trial showed that this plan was defective, in that the student was compelled to crowd the practical work which should be done in the first year into the remainder of the course; and these students were unable to keep up with their classes without greater exertions than were deemed wise by the faculty. Accordingly, this feature has been dropped, and the Medico-Chirurgical College stands squarely on the basis of a three-course school, and, with the exception here detailed, has done so since its organization. This year a fourth course has been added to the curriculum; not obligatory as yet.—*Med. Times.*

Original Articles.

NOTES ON THE DIAGNOSIS AND TREATMENT OF UTERINE CANCER.

BY T. A. ASHBY, M. D., OF BALTIMORE.

Of the diseases which affect womankind none prove more distressing than uterine cancer, when permitted to run its natural history. In former years the victims of this malady were believed to be beyond the reach of scientific aid, and with no better remedies than those "drugs which enslave," were allowed to bury their fate in narcotics until nature severed the bands which bound them to life. Considering the very slow progress which the disease often made, this aimless surrender to the symptoms of the malady became a most gloomy and hopeless state. The extreme frequency of uterine cancer, the age, station in life, and useful relations which its victims often sustain towards society have invested the study and treatment of the disease with great interest and importance.

We witness in the diagnosis and management of uterine cancer the earnest efforts of scientific study and instrumentality, and the beneficent ends which have followed the cultivation of a field which was believed at one time to be wholly unproductive.

With the aid of the microscope and more careful clinical observation and study, uterine cancer may be recognized at a sufficiently early period to admit of complete eradication by surgical instrumentality. And in those cases where the disease has involved a greater part of, or almost the entire uterus, before its presence was discovered or its elimination determined upon, improved methods of operation have been successfully employed for the complete removal of the morbid growth, or for the temporary subjugation of its most distressing symptoms. The surgical treatment of uterine cancer has so far revolutionized the natural history of the disease that it may be stated in scientific language that this affection belongs to the class of curable maladies. Much, of course, depends upon the character, location and extent of the morbid growth, and the promptitude and skill which are employed in its eradication. The manifest importance of an early diagnosis of uterine cancer is quite apparent if the aid of surgery is to be called into service for its removal. It is in the earliest manifestations of this disease that surgical intervention is urgently called for, and unfortunately it is just in this stage of its clinical history that its existence is overlooked or not recognized. It not unfrequently happens that symptoms fail to point to a cancerous involvement until such destructive processes have taken place as render surgical interference a matter of palliation rather than an act of eradication.

A study of the early diagnosis of malignant diseases of the uterus makes it necessary that these malignant growths should be arranged in accordance with their individual peculiarities, physical characteristics and clinical histories. Pathologists recognize only two classes, the cancerous and non-cancerous growths. Among the first are grouped encephaloid, colloid, scirrhus and epithelioma. Among the latter are found sarcoma, myxoma and corroding ulcer. Of these, encephaloid, scirrhus and colloid are extremely rare diseases. Sarcoma, whilst histologically differing from cancers, is, clinically speaking, a malignant affection. For strict clinical purposes, epithelioma, carcinoma and sarcoma are the three types of uterine cancerous development. Sarcoma is an extremely rare form of uterine disease, and when present, almost invariably attacks the fundus. It is with epithelioma and carcinoma that we have chiefly to deal in connection with the uterus. Observers have arranged these two varieties of cancer under different classifications, according to their clinical signification. For convenience of study we may recognize under the epithelial group the "flat epithelioma" and the papillary epithelioma, the former presenting itself as an excavated ulcer, at first limited to the mucous membrane, and next involving the mucous tissues, whilst the papillary form begins as a papillary hypertrophy, the epithelial in-

vestment proliferating as it invades the subjacent tissues and breaking down into a resulting ulcer. New papillary excrescences develop on the base of the resulting ulcer, which in turn break down, and thus extend the destructive process.

Carcinoma differs quite markedly in its primary manifestations from the epithelioma. It begins in the deeper tissues of the uterus and presents at first a more or less firm, nodulated deposit, which is covered by healthy mucous membrane. These nodulated masses spread towards the surface, and ultimately become gangrenous, break down and form cancerous ulcers, which produce rapid necrotic destruction of the tissues. The starting point of carcinoma is believed by some authorities to be the connective tissue of the uterus, but this opinion has been disputed by other and more recent observers, who hold that this variety also commences in the mucous membrane. The student of this subject is met with numerous conflicting statements in regard to the origin and extension of these malignant growths, but nothing seems more definitely settled than the fact that the initial stages of epithelioma and carcinoma are beyond positive demonstration, and that the transformation of a non-malignant into a malignant growth can only be determined by continued observation and clinical study. *The microscope will scarcely be of accurate service to the average clinical observer during this period of transition. We rather think the clinical test is of more positive reliance.

Should the local disease improve under local treatment, the question of uncertainty becomes less obscure. On the contrary, the tendency to an extension of degenerative changes, the increased induration of the parts, marked hypertrophy of the connective tissue, with an abundant cellular proliferation, a total want of improvement in the local lesion under judicious local treatment, all incline to establish a conviction of rapidly approaching malignant action.

Both epithelioma and carcinoma begin in the great majority of cases in the cervix. Primary cancer of the fundus uteri was observed by Goldschmidt only in one instance among 900 cases of malignant degeneration. Sarcoma of the fundus undoubtedly occurs more frequently than the above statistics would show.

The location of other lesions upon the cervix uteri, such as simple erosions, lacerations, vegetating fungosities, areolar hyperplasia, and induration of the mucous and submucous tissues, are at times extremely confusing, and may be mistaken for malignant changes. It is highly probable, too, that we have in not a few of these latter lesions an initiative stage to malignant degeneration which demands prompt recognition and treatment.

The diagnosis of a well-established malignant action should not be a complicated act. Numerous tests are at our command to confirm or disprove a suspicion of malignancy. Such tests do not apply to incipient epithelioma and cancerous infiltration of the cervix underneath the as yet healthy mucous membrane. All must admit the advantages which would flow to the patient from a recognition of these diseases at this early stage of their progress. We have, unfortunately, no symptomatic phenomena which will prove as reliable guides to an early diagnosis. Where attention has been directed to the uterus from various causes, a discovery of the lesions under consideration is highly probable, but cases have and will occur in which the disease has advanced almost beyond the stage for successful local treatment before its existence was even suspected.

In those cases under daily observation, we have clues to the suspicious inroads of malignant disease which, if followed carefully, will indicate the character of the condition observed. Epithelioma of the os uteri always begins in the form of an erosion. It differs from a benign erosion in the fact, that it is more deeply and evenly excavated and possesses more infiltrated borders. The papillæ which

*Note.—Cushing, of Boston, has given an extended study to this subject, and has undertaken to show that the microscope will reveal a pre-cancerous stage. The microscopical appearance to which he attaches the greatest importance is the complete loss of any kind of epithelial covering and the small cell infiltration. In such cases of bleeding erosions in women of fifty or over, a free excision of the diseased parts is indicated as soon as the disease is discovered.

spring from the ulcer bleed more rapidly and often exude at an early period a fluid which Gusserow has described as resembling "meat juice." The behavior of this erosion under local treatment will indicate its true character. Should it fail to heal or cicatrize from the edges, we may be sure we are dealing with an epithelioma. Its complete eradication with the knife or actual cautery is at once demanded. While epitheliomas very early give strong presumptive evidence of their presence, the recognition of a carcinoma, at its very beginning, is far more difficult. We have no abrasion of the mucous membrane to arrest attention, and should the carcinoma begin as a general hypertrophy and chronic induration of the cervical tissue, its true character is very obscure. Where the disease originates in isolated nodules, situated beneath the mucous membrane, its identity is more apparent. It has been suggested by Spiegelberg that the natural elasticity and dilatability of the cervix is destroyed by carcinomatous tissue, and that we have in these conditions and in an impaired mobility of the mucous membrane overlying the deep-seated growth, strong presumptive evidence of malignancy.

We confess to a mistrust of these signs, and would prefer more confirmatory evidence than this information gives.

The constant observation of the suspected disease, the manner of its behavior, and the character of its progress must be relied on to confirm suspicions. A small section of the morbid mass and an examination ot the same with a microscope may lead to confirmatory opinions concerning its nature.

The behavior of certain benign lesions of the cervix, under prolonged irritation or neglected treatment, has led to erroneous conclusions regarding their true character. I am well satisfied that simply innocent tissues have been adjudged as epitheliomatous growths, and have met with destruction by caustics or the knife when less heroic measures would have sufficed.

The eroded edges of a lacerated wound of the cervix will at times develop vegetating fungosities, which a hasty glance would at once pronounce as a papillary epitheliomatous growth. The physical aspects of the two lesions bear the strongest resemblance, and a mistaken diagnosis is readily accounted for. It is here that the clinical test is most reliable. Before radical attempts at excision are practiced, local applications to the eroded surfaces should be instituted, by way of crucial experiment. Should the local lesion improve, we may soon be in a position to affirm that the lesion is innocent, and attempt to repair the lacerated cervix by a proper denudation and closure.

A case selected from my note-book will illustrate this point.

Mrs. M., aged 30 years, the mother of three children, was sent to me from an adjoining State with the diagnosis of uterine cancer. She was then five months advanced in pregnancy, and the question of premature delivery had been considered by her physicians with a view to an early operation for the cancerous growth. The diagnosis of epithelioma was insisted upon by her attending physician, a gentleman of large experience and excellent training; but the husband of the lady in question was unwilling to accept this opinion without further confirmation. He brought his wife to this city and placed her under my care. An examination confirmed the fact that she was well-advanced in pregnancy and that a large papillary erosion occupied the angle of an old lacerated wound of the cervix. The lesion might readily have been mistaken for an epitheliomatous growth, still the clinical history of the case and the physical appearance of the lesion induced me to decide promptly in favor of non-malignancy.

The lady was sent home with the diagnosis, bilateral laceration of cervix, with badly eroded edges. In due course of time she gave birth to her child. She is still living and in the enjoyment ot excellent health. This occurred in 1882.

This case is an illustration of a number of cases of cervical laceration which have come under my observation, in which a hasty judgment might readily lead to an error of diagnosis. The angles of a lacerated wound not infrequently take on an inflammatory condition,

which results in an enlargement of the papillæ, which might readily be mistaken for an epitheliomatous growth. The clinical test applied to these cases will sooner or later establish its true nature.

I have no doubt that the continued congestion and irritation kept up by these lesions on the cervix are a predisposing cause of malignant degenerative changes. Dr. Emmet has observed the causative influence of laceration in the production of epithelioma, and his operation for the closure of this injury has been strongly urged as a prophylaxis of this disease.

Uterine cancer is a disease which follows in the wake of civilization, and is undoubtedly on the increase.

The general concensus of opinion is in support of the assertion that the disease is of local origin, and, therefore, is easily eradicated in its primary manifestations. I have endeavored to show the importance of an early recognition, and the various tests which will enable one to determine the distinction between a malignant and non-malignant action. The difficulty in the way of a correct diagnosis is fully appreciated during the primary or initiatory stage of the disease. I, however, think the practitioner will avoid numerous errors, and at the same time adopt a judicious and successful course of action, if the following general facts are kept before his attention:

First.—An indolent erosion and other inflammatory lesions on the cervix uteri should be kept under close and constant observation. Such lesions should be systematically treated by local applications when this treatment is possible.

Second.—Lacerated wounds of the cervix should not be allowed to remain open when they show the least predisposition to an erosive action.

Third.—Leucorrhœal discharges or profuse hæmorrhage at menstruation or during the intermenstrual period should be a sufficient warning to the practitioner to request a vaginal examination to determine the cause of these symptoms.

Fourth.—Continual backache, pelvic pains, disturbances of the bowels or bladder, a cachectic appearance and fetid discharges should always lead to a careful examination and inspection of the vagina and uterus.

An observance of these rules will enable the attending physician to recognize a malignant disease of the uterus at a sufficiently early period, in the majority of cases, to admit of a radical excision by operative interference.

The physician whose attention is not specially called to uterine diseases may ask, why enforce such rules as are here stated? I answer, because cases are constantly coming under the notice of the gynecologist in which malignant disease has so far advanced as to make surgical treatment almost hopeless, which ought to have been recognized by general symptoms at an earlier period. I wish to be fully understood on this point. I by no means contend that all uterine lesions, or that any large number of them, necessarily tend to take on a malignant action. I simply insist that lesions upon the cervix, within the uterus or on the vagina should be kept under observation, even when circumstances do not favor their systematic treatment. This precaution is especially demanded in women who bear children rapidly, in those who have an hereditary predisposition to cancer, and in those women who suffer from hæmorrhage, profuse discharges or severe pelvic pains.

The following case, which has come under my observation and treatment during the past year, so clearly emphasizes the importance of an early recognition of uterine cancer that its relation here is clearly demanded.

Mrs. S., a widow, aged 42, has been suffering for several years with a profuse leucorrhœal discharge, which about six months prior to the time she came under my notice began to be tinged with blood. Though she had passed the menopause, uterine hæmorrhage was reestablished, at first intermittently, then continuously. For the past three months she had been flooding daily and hourly until she became almost exsanguinated and so reduced in flesh and strength that her life was despaired of. During this time she has been treated by a physician, of over 30 years' experience as a practitioner, yet during the whole of this time she was not examined *per vaginam* a single time. She had taken bottle after bottle of medicine until her digestion was completely broken down by the use of drugs. The patient grow-

ing tired of this physician, he was dismissed and a new medical attendant was found in the person of a young physician, whose recent training had enforced upon him the importance of an exploration to determine the cause of the hæmorrhage. An examination at once revealed an epithelioma of the cervix. Having been called in consultation to see this case by her present intelligent and careful medical attendant, I found upon examination a papillomatous growth springing from the side and mouth of the os externum as large as a goose egg. This mass of cancerous tissue was discharging blood so profusely that the life of this patient would have soon been sacrificed but for an immediate interference.

Here was a condition clearly overlooked and neglected, which should have been removed months ago when surgical intervention gave promise of much better results than an at the time of discovery of her true condition.

I have previously indicated the importance of a radical excision of a malignant disease of the uterus at the earliest moment we become well convinced of the correctness of this diagnosis. The method of accomplishing this result must be left to the judgment and discretion of the operator.

I shall now refer to a class of cases in which the diagnosis of malignant disease is no longer a question for consideration. The only facts which present themselves relate to the question of treatment. Necessarily the location of the lesion enters prominently into the choice of methods of relief. During the last few years, the relative advantages of partial amputation and of complete extirpation have been discussed, and much evidence has been adduced in support of both of these procedures. In 1882 Baker, of Boston, proposed a plan of high amputation, which, in his own hands and in the hands of other gynecologists, has been extremely successful in saving and in prolonging life. The method has for its aim the removal of the morbid tissue by complete excision through the vaginal walls. The procedure is applicable only to cancer of the cervix or lower uterine segment and before the surrounding tissues have become involved in the cancerous infiltration.

In summing up the advantages of high amputation, Dr. Baker offers the following suggestions:

1. That by it we are able to remove more of the uterus than by any other form of high amputation.

2. The opening of the peritoneal cavity is not necessarily involved in its performance.

3. The practicability of using the touch in determining the extent of the disease as the operation proceeds is retained, which cannot be practiced when the galvano-caustic wire is used.

4. All the advantages of the galvano-cautery are retained by the application of the thermo-cautery, at a red heat, to all the denuded surfaces, and made more effectual even by previously being sure that the disease, as evidenced by the touch, had been removed.

5. It is more practicable for the general surgeon than total extirpation.

6. The length of respite from the disease is greater than in any reported cases of total extirpation, and the percentage of recoveries from the operation greater than by any other method of high amputation.

Within the past two or three years the surgical treatment of uterine cancer has leaned altogether in the direction of the operation of vaginal hysterectomy. This procedure has not only been instituted for cancer of the body and fundus, but when the cervix only was involved. Its advocates defend the operation on the ground that it is radical in character and the only correct method of entirely eliminating the malignant tissue. Were this positively true the procedure might be considered entirely legitimate, but it has been shown that the disease will often return with special virulence, and that the mortality of the operation does not warrant its adoption in all conditions of uterine cancer. Much has been done to improve the technique of hysterectomy, and each year shows an improvement in the percentage of mortality. In 1886, the mortality was found upon collection to be 27 per cent. In 1887 the mortality was found to have decreased to $10\frac{7}{8}$ per cent., thus showing a marked improvement in methods and details. It is too soon to determine the extent of the benefit conferred upon those women who have recovered from the operation of hysterectomy. That recurrence will follow total extirpation statistics already show, but Schauta has claimed that 70 per cent. are free from recurrence one year after

total extirpation, as compared with 50 per cent. after partial amputation.

Where the cancerous disease is limited to the tissues of the uterus, the selection of the method of removal lies between high amputation and vaginal hysterectomy. The low mortality rate of the former procedure, and its ease of performance, will incline many surgeons to adopt this plan, the wishes of the patient entering likewise as a factor into the decision. Vaginal hysterectomy is not a simple procedure. In inexperienced hands it becomes a bold and hazardous venture, and should not be undertaken until every step and detail have been mastered and every appliance is at hand for the careful execution of the operation.

Owing to the fact that cases of uterine cancer often do not fall into the hands of the gynecologist until the disease has extended to the tissues surrounding the uterus, the operations of high amputation and of total extirpation are not possible of adoption in all cases. Reliance must, under such circumstances, be placed in palliative procedures. Whilst it may not be within the power of the medical attendant to remove the disease, he may still be able to prolong life and to relieve distressing symptoms. Uterine cancer may progress slowly. It often destroys life by the distressing symptoms it evokes before it has done so by the destruction of vital tissues. Thus pain, hæmorrhage and offensive discharges attend the progress of the disease, and it is these symptoms which often exhaust the life of the patient long before important tissues have become involved. It, therefore, becomes important in the treatment of this disease to palliate or remove these symptoms. To consider them in detail, I shall arrange them under their respective heads.

Pain. Pain is not a constant factor in uterine cancer. Frequently it is not experienced until the disease has extended to neighboring organs. On the other hand, in not a few cases it is an early and one of the most distressing symptoms met with, as well as one of the most difficult to combat. There seems no solace for such cases except in anodynes. Opium plays the most conspicuous part in the treatment of this condition, and whilst it enslaves the patient it is questionable whether its use should be interdicted. In a few instances I have relieved pain by removing large masses of cancerous tissue, thereby removing mechanical pressure, the chief factor in provoking this symptom. The curette then becomes of service in this as in the other symptoms, to which reference will be made.

Hæmorrhage. Hæmorrhage frequently does not make its appearance until cancer has developed to a considerable extent. It may, however, be the first symptom which calls attention to this disease. It is not always regarded by the patient or by the attending physician as an indication of cancerous trouble. The failure to recognize the relation which hæmorrhage bears to this disease has led to serious oversight and neglect. Continuous or copious uterine hæmorrhage should never be permitted to go on without an examination to ascertain its cause. In this way only can an accurate diagnosis be reached.

This rule should apply to all women, but especially to those women who have a return of uterine hæmorrhage after the menopause. The origin of hæmorrhage in uterine cancer is an erosion of the tissues, or a papillomatous growth sprouting out from the seat of the morbid process. Epitheliomas take on a rapid exfoliation of new tissue, and fill the vagina at times with masses resembling in every respect, save color, a cauliflower growth. I have seen a papilloma half the size of an infant's head fill the entire vagina within a comparatively short time after a former removal. The outgrowth of new tissue is very marked and rapid in some cases, and gives rise to copious hæmorrhage, offensive discharges and severe pain. The removal of this tissue has a most beneficial effect upon the patient. It arrests, for the time being, hæmorrhage and pain, and changes the character of the discharge from an offensive to a simple muco-purulent secretion. The sharp curette is the most effectual way to remove this newly-formed tissue. After curetting, the solid stick of nitrate of silver carried into the tissues will remove all that the curette escapes. It

may become necessary to tampon the vagina with iron-cotton for a few days. After removal the cancerous mass will granulate nicely for some weeks thereafter, and the patient will thus gain a respite from hæmorrhage, pain and foul discharges. Her general bobily condition will improve, and all will go on well until the return of the papillomatous neoplasms. It will become necessary to attack the new growth as soon as it puts in its appearance. If this is done the condition of the patient can be kept good for many months, or possibly years, until the cancerous infiltration involves the rectum, or bladder, or other vital organs. An extensive experience with uterine cancer has induced me to regard the palliative treatment, above indicated, as of great value and comfort to these patients. Life can be prolonged and general comfort maintained by repeated attacks upon the progress of the disease, thus as it were "knocking it on the head" as fast as it shows itself in a threatening attitude. The time will arrive when nothing can be done; but this is true of all organic troubles. We may help these patients vastly by a cautious use of the curette and escharotics.

Foul Discharges. The necrosis of uterine tissue and the retention of blood and secretions make a most offensive odor in these cases of uterine cancer. The patient is often a nuisance to herself as well as to others. To combat this symptom nothing is more effectual than the curette and caustics. Keep the cancerous mass clean and the offensive discharges will cease. So long as necrotic tissues are removed and decomposed blood and vaginal discharges are not allowed to accumulate within the uterus or vagina, the foul odor will not be present. I have seen these cases kept free from unpleasant odors up to the very time of death by the method suggested. In the intermediate stages of uterine cancer—that is, during the time the disease is beyond eradication, but susceptible of palliation—these patients may be able to go about and enjoy social and devotional exercises in fair health and comfort. This would not be the case were not local treatment employed in the manner previously indicated. The highest mission of science is to prolong life and render it comfortable. All organic diseases lead to a fatal termination, but if we can arrest degenerative processes by medicine or by surgery, the result is worthy of accomplishment. This hopeless malady to which I have called attention appeals loudly to the sympathy and skill of our profession. Let no one despair of being able to render a service to such cases.

A CONTRIBUTION TO THE STUDY OF BONE REPAIR.*

BY JOHN S. MILLER, M.D., OF PHILA.

The recent observations of Macewen† have done much to stimulate the study of bone repair, and have not thrown a little light upon the function of the medullary cells in osteogenesis.

The resort to mechanical irritation of the medullary tissues as a means of accelerating bone repair, is an old procedure. Nancrede‡ claims a priority in this for America. As far back as 1793, Eve relates that the lay surgeons of the frontier were wont to make multiple perforation of the external table of the skull where necrosis had followed the Indian multilation of scalping. And twenty years ago Agnew ‖ resorted to the same procedure in a case of injury to the head. A fatal termination of the case, however, by encephalic complication, rendered the experiment incomplete. Reports of success by this procedure have been recently multiplied to an extent which will excuse us from repeating them in detail.

That furthermore, medullary proliferation is not only an element in osteogenesis, but is of itself sufficient to that end without periosteal coöperation, is evidenced by the case of Macewen,§ in which a considerable restoration of the humerus was secured "by bone-

*Read before the Philadelphia County Medical Society, June 12, 1888.
†Annals of Surgery, vol. vi. p. 289 et seq., 389 et seq.
‡Internat. Encycl. of Surg., by Ashhurst, vol. v. p. 8:
‖Remarkable Cases of Surgery, p. 35. Phila., 1857.
§Loc. cit., p. 301.

transplantation," after a suppurative inflammation had destroyed both the shaft and its periosteum. The date of this observation is 1878.

The patient was a boy, two years of age. A suppurative periostitis of the right humerus of nine weeks duration had resulted in total necrosis of the entire diaphysis, and this latter had been removed, leaving a tube of granulation material lining the periosteum. This tube had been kept patent by suitable dressing, until the whole space had become filled with granulation tissue, and had finally become a mass of cicatricial tissue. No bone had grown from this periosteum, except in a small part next the proximal epiphyses, where at the outset the periosteum had been found covered with plaques of adherent osseous tissue. In the remainder there had been no osseous deposit, the result being a flail-like arm, which the patient found so useless that the parents desired its removal.

Macewen determined, however, upon another procedure. An incision was made into the upper third of the arm, exposing the head of the bone, to which was found attached a spike-like process of cartilage. This was removed, leaving as remains of the diaphysis a portion of bone one and three-fourths inches in length. From this point a sulcus about two inches in length was made in a downward direction between the muscles. The former presence of bone was nowhere indicated, and there was no vestige of periosteum, and the sole guide as to the correct position into which the transplant was placed was an anatomical one. Two wedges of bone were then removed from the tibia of a patient aged six years, with anterior curves. The face of the osseous wedges consisted of the anterior portion of the tibia, alone with its periosteum, the wedges gradually tapering toward the posterior portion of the tibiæ.

After removal they were cut into minute fragments with the chisel, quite irrespective of the periosteum. The bulk of the fragments had no periosteum adhering to them, they having been taken from the interior of the bone, They were then deposited into the muscular sulcus of the boys arm, and the tissues drawn over them, and carefully adjusted. The wound healed without pus production. Two months after, a portion of bone an inch in length and three-quarters of an inch in thickness was found firmly attached to the upper fragment of the humerus.

Two other wedges of bone, larger in size, were similarly dealt with, and inserted two months subsequently to the first graft, and a third couple were placed in position five months after the first. These filled up the gap in the arm to the extent of four and one-quarter inches. The arm then measured six inches in length.

Soon the utility of the arm was greatly restored. Seven years afterward he was seen and examined. The shaft of the humerus was found to have increased in length by one and three-quarter inches, being now seven and three-quarters; and it had increased in circumference to a marked extent, and assumed a somewhat irregular shape. The length of the sound arm had, however, considerably outstripped the length of the transplanted humerus. He could use the arm for many purposes, taking his food, adjusting his clothes, and many games.

Whether the introduction of proliferating cells into ordinary connective tissue granulations may convert the whole into osseous tissue, or that a few osteoblasts will, so to speak, leaven the whole mass, is a question involving grave doubt, but the affirmative would seem to receive some support from the case which Nancrede‖ relates in 1883. An extensive laceration had caused denudation and necrosis of the ulna in two-thirds of its extent. The process of repair had been delayed, he drilled numerous holes through the sequestrum into the medually canal, and, to quote his own words, "in a few days granulations sprang up from the ulna and fused with granulations of the soft parts, and, in course of time, the fragment was separated."

‖Transaction of the Philadelphia Academy of Surgery, 1888.

That the procedure in this case had the effect of stimulating osteogenesis from within, we can readily believe; but concerning the fusion with granulation tissue without, a more accurate observation than is recorded by Nancrede is desired. Although by analogy we might conceive it possible, inasmuch as repair within the bone is by ossification of an embryonic tissue derived from the connective tissue around the blood-vessels of the medullary spaces. A similar case is reported by Macewen,* in which granulations appeared upon a surface of bone completely denuded of its periosteum, and gradually spread until they became united with the granulation tissue at the periphery of the wound. Macewen, however, infers from this observation that

"The periosteum covering a bone may be completely destroyed or permanently removed, yet the denuded bone may not only retain its vitality, but may throw out cells which will cover it and form a new periosteum."

These cases would seem to confirm Macewen's dictum that the periosteum has no part whatever in the regeneration of bone. But the first case I shall present to your notice this evening demands a different hypothesis for its explanation.

The patient, D. M., aged fourteen years, suffered from an osteomyelitis of the right tibia, resulting in total necrosis of its diaphysis. A complete involucrum had formed around the sequestrum and afforded an unsteady support to the body weight. It was covered with the thickened periosteum. A number of fragments had been removed from time to time, and the parents had refused to entertain for him the proposal of amputation. The case, however, when it came into my hands, had become from septic infection so desperate that I was compelled to do something radical at once.

Exposing the shaft, or rather the involucrum, through its whole length, I made with trephine and saw a fenestrum large enough to permit the removal of the remaining sequestra, and cleared out the whole canal. Both epiphyses were found carious upon their exposed surfaces, and were scraped to the limit of safety. In a few days a superficial necrosis took place upon the inner surface of the tube.

Demarcation was, however, promptly effected by the free use of aluminum acetate†—that sheet-anchor in all sloughing wounds—and a fine layer of fine granulations became the field for any osteogenesis which we might hope to witness. During the long process of repair with the carious epiphysis as a never-failing source of bacterial supply, it was no trifling task to keep this extensive opening dry and sterilized. Furthermore, neither the patient, the household, nor the neighborhood could endure frequent dressings without great nervous prostration.

The requirements of the case were successfully met by a mixture of iodoform and starch, in proportions which varied with the changing conditions. The cavity of the wound was filled with this dry powder, and to the whole was applied a closed dressing of gutta percha tissue. The purpose of the starch was to absorb the excess of moisture incident to a closed dressing as well as to dilute the iodoform. As soon as the powder became saturated, it was removed by a stream of sterilized water, and the wound was filled and closed as before. The periods of dressing were gradually increased from three to ten days. I mention these details, because without them, or similar ones, we can wait in vain for the desired repair. In process of time the hollow of the involucrum became completely filled with granulation tissue, which continued to extend until it fused with the granulations from the soft parts, and, finally, the whole became covered with a new epithelium, which had gradually spread from the edges of the wound. The tissue became denser, and offered more and more support to the body weight until, as you see, he has acquired a very useful limb, and can walk without discomfort.

*Loc. cit., p. 293.

†℞.—Pot. et alum. sulph., 1 part; plumb. subacet., 5 parts; aquæ bull., 100 parts. M. Filtra.

We must, therefore, infer that a metamorphosis into bone has taken place, and as the original diaphysis was gone with its medullary structure, we can find no osteogenic agent in the result other than the periosteum.

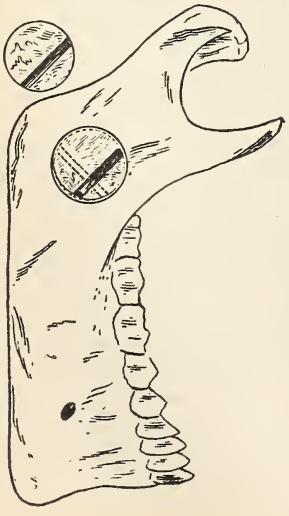
We must draw a similar conclusion from the recent case reported by Ceci:

The patient, a young man, developed an acute osteomyelitis of the left scapula five days after circumscision for inflamed phimosis. One month later, Ceci* extirpated the bone, making the usual L-flap. The periosteum was left intact as far as possible, and the arm was preserved. The patient recovered rapidly and there was a subsequent regeneration of the bone. The only possible explanation of this result is by the hypothesis of periosteal agency or coöperation.

The second case which I present is in confirmation of Macewen's proposition that

"A portion of bone which has its continuity severed on all sides, and has had its periosteum removed, is capable of living and growing."

This is in contradiction to our inference in the case of the tibia, and can be reconciled only by the assumption that the discovered laws of osteogenesis are of a lower order, subject to some general law of which we are as yet ignorant. But to the case.



*Centralbl. f. Chirurgie, Dec. 17, 1887.

Mrs. L., aged forty-seven years, had suffered with a neuralgia of the maxillaris inferior, for the relief of which all medical means had been exhausted in vain, and which, therefore, left to my option only the denier resort of neurectomy. The mode of operating was the usual one. The ramus was trephined near the angle of the jaw, the canal was exposed, and about two inches of the nerve trunk were drawn out and exsected. The button was, however, returned after having been sterilized in a 1 to 1000 solution of corrosive sublimate, but it was not returned to its old position. With a view of imposing a barrier to the reproduction of the nerve, it was so rotated around its vertical axis that the groove upon its lower surface stood at right angle to the axis of the canal. Not only did the wound close by first intention, but the button grew solidly in its position. Now, the curious thing in the case is, that before trephining I had carefully removed the periosteum, so that the latter can claim no part in the subsequent bone repair. After seven months there has been no return of the disease.

THE RELATION BETWEEN OTORRHŒA AND PHTHISIS, AND THEIR TREATMENT.

BY ROBERT HOFFMAN, M. D.,
OF BALTIMORE.

It is a well-known fact that phthisis is often associated with disease of the middle ear. After perforation of the drum following purulent inflammation of the middle ear, pus forms in the bone, which undergoes caseation by metastasis invading the lymphatics, and thus developing phthisis. Although unable to demonstrate the bacillus of tuberculosis in the secretions of the ear, in the case under observation, I still maintain that the otorrhœa was the direct cause of the phthisis. The history of the case is as follows: Patient thirty-six years old; occupation miller; descendant of a healthy family; when twenty-five years old contracted pneumonia. Two years ago he

began to cough, complained of pain in the chest and fulness in the head, followed by deafness of left ear, with purulent discharge from same. The cough and pain in chest grew worse, patient rapidly lost flesh, became hoarse and feverish, the sputa was bloody; about this time night sweats developed. At the time patient came under my observation, an examination found fingers club-shaped; he was very pale; pulse rapid, with irregularly intermittent fever; abundant expectoration of muco-pus, streaked with blood, in which were found the specific bacilli; urine normal, notwithstanding patient was constantly feverish; the chest was flattened, with depression under right clavicle, decreased movement during respiration; percussion sound dull over apex of right lung; slightly emphysematous prominence of intercostal spaces, a condition often present in millers; the neck is long and thin; liver extends to the umbilicus, and corresponds generally to the waxy liver observed in phthisis. On auscultation positively moist rales, with bronchial and cavernous breathing were noted. I had to deal here with infiltration in the apices of both lungs, with cavities forming in the right. My patient evidently suffered from phthisis, the starting point of which must have been the otorrhœa, careful and early treatment of which would probably have prevented the development of the phthisis. I believe this statement applies equally as well to some other diseases preceding it, viz.: diseases of bone, suppurating glands, chronic and fungoid inflammation of the joints, etc. Notwithstanding the discovery of Koch's bacillus of tuberculosis, opinions differ as to the curability of phthisis. I would designate it as curable in its early stage, and where it occurs under favorable circumstances and with but a slight hereditary predisposition, whereas as incurable, when in its advanced stages and when the outside influences are unfavorable. The application of therapeutics, as indicated by the discovery of the specific bacillus, (inhalation and injection of antiseptic fluids,) has not given satisfactory results, although Sommersbrodt, of Breslau, and others, claim that patients were benefitted by the internal use of creasote with balsam of tolu. Putting patients to bed who are suffering from phthisis and giving them enormous quantities of medicine to swallow should be, if it is not, a thing of the past. It is just as important to see that the consumptive gets the proper atmosphere to inhale as it is for the dyspeptic to eat proper foods. The consumptive should reside in the higher forest regions, for here the atmosphere is dry and pure; sometimes sea voyages are of benefit. I have time and again observed the good effects of long trips on the ocean in these patients while traveling in the tropics. Because of the manifest danger arising from the stagnation of secretions in the lung cavities and bronchial tubes, I advocate the climbing of mountains, etc., as the patient is thereby obliged to breathe deeply. They should take a great deal of fatty foods and alcohol, and if not troubled with hæmopthisis, beer and wine can be profitably taken.

Milk is probably the most valuable of foods to the consumptive, as it is generally well born and can be taken for a long time. In some parts of Germany, dog fat and snails are popular remedies. The improvement often noted in patients from their use can be easily accounted for, viz., they are fatty foods, from a lack of which the whole organism suffers. For the reduction of temperature, sponging the whole body with cold water, or putting an ice bladder on the chest, are preferable to antipyretic drugs. Atropia, with a glass of brandy and milk at bedtime, usually controls the night sweats. If the cough is very annoying, morphia is probably the best remedy. It should, however, be used carefully, particularly in patients whom we hope to cure, for it is very evident that we add very much to the danger by allowing the tuberculous secretions to accumulate in the lungs. In closing, I suggest that: 1. Phthisis is often preceded by otorrhœa, suppurating glands, chronic and fungoid inflammation of the joints, etc. That 2, by careful treatment of such diseases, the development of phthisis is suppressed; that 3, phthisis is a curable disease if seen early, and rational treatment is adopted.

204 W. Franklin Street.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING JUNE 12, 1888.

The President, C. B. NANCREDE, M.D., in the chair.

Dr. John S. Miller read the following paper on

A CONTRIBUTION TO THE STUDY OF BONE REPAIR.*

DISCUSSION.

Dr. John B. Roberts: It is a curious fact that the medical mind has not appreciated the possibility of bone production, despite the frequent instances that must always have come under notice. I was taught in cases of comminuted fracture, to take out the spicules of bone that were entirely separated from the larger fragments, lest they should necrose and give rise to trouble. Now it is the practice of the best surgeons to leave the spicules, and we find that often they do not die, and that they assist in the process of union and solidification. This experience is in the same line as the facts given by Dr. Miller in connection with his interesting cases. If these spicules of bone can reunite, why not the button removed by trephining? Why is it not good practice to insert, when necessary, a portion of dog bone or chicken bone? as, indeed, has been done. We must not forget, however, the importance of asepsis, and that it is antiseptic surgery that has made these procedures possible.

In a case such as Dr. Miller reports to-night, where he rotated the button of bone, turning the groove in which the inferior dental nerve had run at right angles to its former direction, I should be inclined to go still further, and turn it upside down. The bottom of the pit in which it is to be placed, and the periosteal surface of the button being scraped, the ungrooved, freshened surface, formerly external, would then be placed inward, and a bony plug would be interposed between the divided ends of the nerve, probably preventing the reunion and return of pain which so often occur.

The case of tibial resection has been very interesting to me, as I have recently operated upon a similar one; the patient being, however, a woman of about fifty years, so I cannot hope for as complete a closure of the cavity in the bone as in this growing child, exhibited by Dr. Miller. In that case I removed the whole front of the tibia, going as near the articular cartilages above and below as I dared. The process of repair is like that we see in a tree. We know that if a foreign body is inserted into a wound made in the trunk of a young tree, the process of cell growth will go on about it, and finally it will be completely covered in, and its presence be unsuspected, until, perhaps, the saw strikes it, as the tree is being converted into lumber.

Dr. Keen, in his recent case of trephining for brain tumor, returned the button of the skull removed, and the patient was able in a few days to walk around with a perfectly healed and reunited cranium. Then we know what the dentists do in the way of transplantation of teeth, or return of teeth to their original sockets after removal of diseased portions. More remarkable still is the implanting of old, dried teeth into new sockets, bored in jaws from which even the alveolar process had disappeared, and their becoming fixed there.

Dr. George E. Stubbs: In reflecting upon these cases, and similar ones, it occurs to me that perhaps in the numerous resections we have done in army and in civil practice, we have made mistakes. Surgery has advanced immensely since the war-time, and antiseptic surgery has opened new possibilities. Often in my army practice we removed all the bone when there had been a comminution. I should now, with our new light, try to save more of the broken bone, and so shorten the period of recovery.

In regard to operative treatment of

*See page 267.

neuralgia, I believe that we are entering upon a stage of work that will be much enlarged in the near future. I had a case recently in which neuralgia of the inferior dental nerve had existed for nearly seven years. I removed one and three fourths inches of bone with the dental engine, took out as much of the nerve as I had access to, and dressed and treated the wound antiseptically. The wound healed by first intention, and as yet there has been no return of pain; so that I consider I have obtained a very good result.

The Chairman, Dr. Nancrede: The first question to be answered in a discussion of this kind is, What constitutes the periosteum? If we mean a fibrous membrane, the inner layer of which consists principally of yellow elastic tissue, then we must agree with Macewen's extreme views, and admit that it has nothing to do with bone repair. But if we study the normal process of bone development, I, at least, must arrive at a different conclusion. The long bones are laid down in cartilage, a temporary structure. How do they ossify? By means of this very periosteum, which Macewen treats with such contempt, and which Ollier exalted too highly. There is a third layer of the periosteum in direct contact with the bone, and this layer is composed entirely of those elements which, wherever we see them, we recognize as the agents of ossification—the osteoblasts. The temporary cartilage is invaded by connective tissue, ingrowths from the periosteum, covered with osteoblasts, and is eaten up by them; and we find it permeated, and finally replaced by a net-work of fibrous tissue covered with osteoblasts. A certain number always remain beneath the periosteum. A certain number, very small, remain in the Haversian canals, a still larger number in the medulla.

It is clear to me why compact tissue dies; it has so few osteogenetic cells. The medullary tissue lives because it is comparatively rich in osteogenetic elements. Why does bone die when the periosteum is stripped off? Because the resulting inflammation is so severe that the inflammatory tissue strangulated the osteoblasts in the Haversian canals. With antiseptic means we now control the inflammation, and the osteoblasts are not killed, and the bone is saved.

We are very hard, nowadays, on the periosteum. The fibrous layer has nothing to do with bone repair; but its osteoblastic layer is in direct communication through the lining of the Haversian canals with the medulla; it is practically one structure; and thus, if we look at this matter from the standpoint of a correct histology, we find that both views are correct, provided only that we have a distinct understanding what is meant by the word periosteum in each case.

As to Dr. Miller's cases, I cannot quite agree with him as to what formed the bone in the case of total excision of the diaphysis of the tibia. While the shaft was dying, new bone was formed by the deep layer of periosteum, but after that the medullary spaces of the involucrum completed the bone.

I would also take exception to Dr. Roberts's proposition to scrape the button of bone and turn it inside out, in the case of trephining the jaw for neuralgia. By this process he would remove all the osteoblastic cells, and the compact tissue would have a very good chance of dying. One reason for failures in operations about the lower jaw, is that it contains so little true medullary tissue, while, on the contrary, we can replace trephine buttons in the skull and have union, because the skull contains a large amount of such tissue.

I think Dr. Stubbs need not blame himself for his practice in resecting in military surgery. The necessary condition to bone repair is that absence of suppuration afforded by antiseptic methods, and under the conditions in the operations he speaks of, he did right. And, to-day, he does right in trying to save the bone. In each case he takes the proper course in relation to the circumstances, and that is all any one can do.

The case of Dr. Agnew, referred to in the paper, occurred some twenty odd years ago. I saw the operation. The wound was completely covered by granulations. The fact that a denuded ex-

ternal table did not always necrose was known to Potts, and to all the older as well as modern surgeons, and if Ollier had not led us astray by grafting, by insisting upon the periosteum being the sole osteogenetic agent, ignoring the fact that in removing it a layer of cells identical with those of the medulla are torn off, I think we would have arrived at a correct practice sooner. But surgeons went wrong by authority of Ollier, as they are now going wrong in the other direction by authority of Macewen.

In regard to the implantation of dead teeth, which Dr. Roberts refers to, the principle is probably the same as in the bony pegs we used to employ for ununited fractures. They are hollowed out by the granulation tissue which develops into a fibrous or even osseous tissue, and so holds the tooth in place by these newly formed digitations.

About twelve years ago I exhibited to this Society a case in which I resected four and a half inches of the humerus, and about two and a half inches were reproduced from the sawn end. This was without antisepsis. In the case referred to by Dr. Miller, where I drilled the ulna, I am sure that the bone granulations fused with those of the soft parts for these reasons: the shell of bone when detached was not more than one-fourth the thickness drilled through, while the new bone was nearly as thick as the ulna of the other side, as the cicatrix was not materially depressed. A recent experience in a case of knee-joint excision, induces me to recommend that instead of wiring fragments of bone we nail them together, after having previously drilled or not, according to circumstances, allowing the heads of the nails to project through the skin. We thus save trouble, and avoid damage in the removal.

Dr. Roberts: Dr. Nancrede misunderstood me in regard to scraping away the cancelled tissue in reversing the plug in the case of trephining the lower jaw. I would scrape only what he calls the fibrous periosteum from the button, and from the bottom of the pit in the jaw I would take away the cancellated structure sufficiently to remove all trace of the nerve canal. The two raw surfaces would be placed together, and, by sinking of the button, would be a solid bony plug, interposed between the nerve ends.

Dr. Miller: I do not see any advantage in reversing the plug over rotating it. The groove being at right angles to the course of the nerve, the part in contact with the nerve is still solid bone, and the groove does not matter at all. In relation to the tibia case, the reason I emphasize the fact that the repair took place from the periosteum, is because there was entire death of the old bone with the involucrum, and the periosteum did not die.

Sea-Water in London.—We learn with satisfaction that the London Sea-water Supply Bill has passed both Houses of Parliament. An extension of time is granted for completing before July of the year 1890 the works which were authorized in 1881 for bringing a sea-water supply to London from the county of Sussex. The reservoirs in the metropolis will be near Clapham Junction and Hammersmith. Sea-water will supply many useful purposes; it will, doubtless, be largely employed for baths in private houses, and will, we hope, be utilized in public bathing establishments. In time it may probably replace fresh water which is now used for street watering, and save the former, which is becoming scarcer as London grows.—*The Lancet*, July 21, 1888.

Deafness Treated by Pilocarpine.—Pilocarpine would appear, according to Corrado Corradi, to be very serviceable in the treatment of deafness due to labyrinthine derangements, whether associated or not with disease of the middle ear. Large doses may be required. In one case two centigrammes of pilocarpine were injected twenty-four times. Moos has injected from five to eight drops of a 2 per cent. solution in cases of deafness resulting from diphtheria. Considerable improvement of hearing resulted even in cases in which deafness had existed for three weeks. Care is required lest the pilocarpine should increase the debility of post-diphtheritic cases.—*The Lancet*, July 21, 1888.

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BALTIMORE, AUGUST 4TH, 1888.

Editorial.

THE CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.—The first triennial session of the Congress of American Physicians and Surgeons, it is now authoritatively announced by the committee of arrangements, will be held in the city of Washington during the 18th, 19th and 20th of September. The preliminary programmes of the societies participating in the congress was published some months ago, whilst the final programmes will be issued at an early day. From these different sources the character of the proposed congress is fully understood. The congress is then only a simultaneous gathering at Washington of all of the special societies of this country, each society holding its own sessions and conducting its own independent work as heretofore, and holding a position to the congress as that of a section. The place of meeting at the capital for each society has been secured, and so located that members may interchange attendance without annoyance.

The meetings of the congress will be held in the evenings of each day, thus in no wise interfering with the meetings of the societies. At these meetings of the congress its general business will be discussed, and it is also proposed that addresses shall be given by the president and other distinguished speakers, previously selected for the purpose, The social entertainments, which have been so conspicuous in previous meetings of this character, will be informal, and limited in number to a dinner on the evening of the 17th, and to a collation on the evenings of the 18th and 20th.

A number of distinguished foreign physicians and surgeons have signified their acceptance of the invitation to attend.

The meetings of the congress and of the different societies will be open to the profession, so that any physician desiring to attend the congress, and who may not be a member of any of the special organizations, may feel at liberty to do so. Though the programme issued by the committee of arrangements does not so state it, we presume that such members of the profession as may attend the sessions of the congress or of the societies will be made the invited guests of the same.

The work of the congress will be limited to its membership, which, as has already been explained, is composed entirely of the members of the various special organizations represented in the congress.

At first sight certain disadvantages might appear to result from the limit fixed by this plan of organization, but reflection will show that the entire aim of the congress is to foster scientific work in the various departments of medicine, and it is assumed that this can be better done by special workers in the departments than by a promiscuous gathering. Any physician who so desires can obtain membership in the congress by first obtaining a membership in any one of the special organizations in which he may choose to work.

It is proposed to hold meetings of the congress every third year in the city of Washington.

The first meeting of this confederation of special societies will determine the future of similar meetings. It is only at this time that the special societies will

meet at the national capital. At all times they preserve their independent organization, and may recede from the congress at will. Whether the doctrine of secession will ever come into prominence in the councils of this congress, as it has done in those of the nation, is an irrelevant question at this time.

The cordial way in which the congress has been endorsed by the various national special societies would indicate that its future usefulness was fully assured, and that its work and purposes will strengthen as the years of the congress are added.

Chian Turpentine in the Treatment of Cancer.—The tendency of modern pathological investigation is in the direction of a specific origin of disease. Attempts have been made to discover a bacillus of cancer, though as yet without success, and there are some observers who are hopeful of finding a specific for cancer, just as we have for syphilis. The result of this line of inquiry has been that the internal treatment of cancer has come into notice, and attempts have been made to cure the disease by the administration of drugs.

Prof. John Clay, the veteran ovariotomist of Birmingham, England, has for a number of years claimed that Chian turpentine, administered internally, would cure cancer, and he has so strongly insisted upon this fact that others have been induced to employ this remedy. The results have not sustained Prof. Clay's assertions, and very few observers have placed confidence in the drug.

Prof. Clay, however, insists that the pure drug only is reliable, and that the adulterated product has been employed.

The genuine Chian turpentine is a soft solid, becoming brittle by exposure. It is opaque and of a dull brown hue. It has an agreeable, mild, terebinthinous odor, and very little taste. Tha gum is obtained by incisions into the bark of the *pistacia terebinthus,* a tree which is a native of the island of Scio, in the Mediterranean. The gum contains many impurities, which undoubtedly accounts for its want of uniformity in strength and efficacy.

Prof. Clay has employed Chian turpentine in pill form, each pill containing three grains of the gum, combined with two grains of flower of sulphur. Two pills were given every four hours for many weeks, and in some cases for nearly a year.

More recently Prof. Clay administered the drug in the form of an emulsion, made by first dissolving one ounce of Chian turpentine in two ounces of sulphuric ether. This solution is made into an emulsion by adding one ounce to one ounce and a-half of powdered gum arabic and nine ounces of water, making a ten-ounce mixture. The dose of this is one to two teaspoonfuls.

Dr. Danl. Lewis, (*N. Y. Med. Journal,* July 21, 1888), of New York City, has been experimenting with Chian turpentine in the Skin and Cancer Hospital of that city, and he reports decided benefit in a case of uterine cancer, and in a case of epithelioma of the face under the use of this drug. In other cases no effect had been noted.

For the present the internal treatment of cancer may be considered *subjudice.* In course of time we may hope to see some progress made in this direction, for there seems to be no more reason, theoretically speaking, why cancer should not be cured by drugs than syphilis.

Reviews, Books and Pamphlets.

Partial Syllabic Lists of the Clinical Morphologies of the Blood, Sputum, Fæces, Skin, Urine, Vomitus, Foods, including Potable Waters, Ice and the Air, and the Clothing, (after Salisbury), by Ephraim Cutter, M. D., LL. D., etc. New York: Published by the author, 1888. Pp. xviii–81.

Taylor's Clinical Atlas of Venereal and Skin Diseases, including Diagnosis, Prognosis and Treatment. To be completed in eight folio parts, measuring 14x18 inches, and embracing 58 beauti-

fully-colored plates, with 192 figures, 65 engravings, and about 400 pages of text. Price per part, $2.50. For sale by subscription only. Two parts to be issued every two months. Parts I. and II. Philadelphia: Lea Brothers & Co., 1888.

Ptomaines and Leucomaines, or the Putrefactive and Physiological Alkaloids, by Victor C. Vaughan, Ph. D., M. D., Professor of Hygiene and Physiological Chemistry in the University of Michigan, and Frederick G. Novy, M. S., Instructor in Hygiene and Physiological Chemistry in the University of Michigan. Philadelphia: Lea Brothers & Co., 1888. Pp. viii–13 to 316. Price $1.75.

The Male Uretha, Its Diseases and Reflexes, by Fessenden N. Otis, M. D., Clinical Professor of Genito-urinary Diseases in the College of Physicians and Surgeons, New York. Detroit: George S. Davis, 1888. Pp. viii–86. [The Physicians' Leisure Library.]

A Practical Text-book of the Diseases of Women, by Arthur H. N. Lewers, M. D. Lond., M. R. C. P. Lond., Assistant Obstetric Physician to the London Hospital, etc.; with illustrations. Philadelphia: P. Blakiston, Son & Co. Pp. xvi–400. Price $2.25.

Miscellany.

Enemata of Water in the Treatment of Diarrhœa and Dysentery.—Raymond Tripier (Jour. des Sci. Méd de Lille, April, 1887) reports the use of hot water as enemata with an infant twenty-one months old, whose dysenteric movements were every fifteen or twenty minutes. After the first injection there was no movement for two hours, and in a short time the child was convalescent. The temperature of the water should be 45–48° C., and from 300 to 500 centimetres in quantity. If enemata alone do not answer, decoction of ipecac is given internally.

Injections of *ice-water* are said to be used at the Birmingham General Hospital with marked success in severe forms of diarrhœa in children, two or three fluid ounces being injected each time. The immediate effect, even when there are symptoms of callapse, is quiet sleep, and diarrhœa is in general easily controlled by a few injections. Medicine by the mouth is also given. Dysentery is not readily controlled by medication, especially with patients living in overcrowded houses, and enemata of hot water seem reasonable.

Enemata of cold water (not iced) have been of great service in the non-inflammatory forms of diarrhœa, especially when nervous and muscular tone are much depressed. An easily worked bulb-syringe is best adapted for these enemas, which should be given either after each movement (if the movements are frequent), or every two hours, until there are but three or four movements per day. An opiate (perferably the deodorized tincture) may be given in the enema, if there is great restlessness or much tendency to strain. Internal medication, if possible, had better be dispensed with. Frequently one injection of cold water, together with regulation of the diet, will cure a comparatively mild case of diarrhœa.—*Brooklyn Medical Journal.*

Treatment of Summer Diarrhœa by Antiseptics.—Dr. Wm. F. Waugh (Philadelphia Medical Times, August, 1887) states that he has treated thirty cases of summer diarrhœa with the sulpho-carbolate of zinc without one death. The cases included inflammatory, entero-colitis and true cholera infantum as well as milder forms. The salt was given in doses of one-sixteenth of a grain every two hours, with one to five grains of bismuth; and, if well borne, the dose was increased to one-fourth of a grain for a child in its second summer. The Doctor claims that the zinc salt is superior to naphthalin and salicylic acid, in that it is more palatable and less irritating to the stomach. Its effect is to stop vomiting and to render stools less offensive, but it sometimes makes them more copious. When the last effect occurs, he substitutes an enemata of flaxseed tea containing five grains of the zinc salt

and a half drachm of bismuth. Fever was treated by antipyrin in doses of one or two grains.

Within the last few years the antiseptic treatment of summer diarrhœa has made an advance, prevailing opinion being that micro-organisms in food and air have much to do with the causation of the affection. Antiseptics, allaying nervous irritability by pure air and quiet surroundings and minute doses of opiates or bromides, relieving irritation by regulation of diet, small doses of carbolic acid, opiates, ipecac, cocaine or calomel, and by enemata of water, seem to be preferable to the use of astringents. As antiseptics, Dr. Holt has used to advantage, at the Infants' Hospital at Mt. Vernon, salicylate of soda, resorcin, naphthalin, and the bichloride of mercury. Dr. Sarah J. McNutt (Post-Graduate Journal, July, 1887) is favorably disposed to the use of the bichloride.—*Brooklyn Medical Journal.*

Origin of Simple Ulcers of the Stomach.—An evident correlation, M. Letulle asserts, may be observed between the evolution of an infectious malady and the development of ulcerating lesions in the stomach and intestine. At the necropsy of a case of puerperal septicæmia two hæmorrhagic ulcerations of the stomach were found. The subjacent venules were thrombosed; and the fibinous clot contained a large number of streptococci, and the venous sinuses were stuffed with colonies of the same micro-organism. Experimental proof has been forthcoming, on the guinea-pig, of the production of mucous and submucous lesions, not only with pure cultivations from cases of dysentery, but also with the staphylococcus pyogenes aureus. The lesions have ranged from ecchymoses to vast rounded ulcerations threatening perforation of the experimentally dilated stomach. It is thought that some cases of simple ulceration of the stomach and duodenum may be ascribed to local growths of micro-organisms.—*Lancet*, July 14, 1888.

Operating Without Permission.—Our attention has been drawn to the account of an inquest recently held on a patient who had formerly been in the London Hospital, where amputation of the leg was performed. The verdict returned by the jury was "Death from shock" (*sic*). When we mention that this operation was performed four months previously, the usefulness of this inquest and the sapience of the jury may well be called in question. But there is another side to the question. The father made a complaint that the operation had been done without his consent; but until the inquest the hospital authorities had heard nothing of any resentment on his part with regard to this. It would appear that the patient was placed under an anæsthetic, as permission had been obtained to examine into the nature of an unusual swelling which had developed after a contusion of the thigh, and that this was found to be an extensive sarcomatous growth. There being no question as to the necessity for amputation, and as the child would have run grave risk if the condition had been left as it then was, and operation postponed, amputation was performed at once. The consent of parents to any operation is obtained as a matter of course in all cases, but at times the surgeon has to act on his own responsibility, and stand *in loco parentis*. That the father was satisfied at the time is proved by the fact that he left the child in the hospital, sent her back again later for a further operation when recurrence took place, and went again for medicine for her after she left altogether. A jury is guilty of grave injustice to a hospital when no opportunity of replying to the charges brought against it is given to the authorities.—*Lancet*, July 14, 1888.

Children's Teeth. — At a recent meeting of the Islington Board of Guardians a discussion took place as to the appointment of a surgeon-dentist for the workhouse schools, as recommended by the School Committee. There was considerable opposition, and the matter was referred back to the School Committee for further report. Our contemporary, the *St. James's Gazette*, very justly says: "Whatever the result, there

cannot be a doubt that the preservation of their teeth is a matter of no slight importance to pauper children. The rate of mortality among the poorer classes would perhaps be much reduced if more attention were paid to the condition of their teeth when young." On the ground of expediture alone it would in all probability be found a saving. Whenever it has been tried it has been found to bring about the most beneficial results. In his last report the resident medical officer at the Anerley schools (which was, we believe, the first charitable institution to appoint a dental surgeon) draws especial attention to this subject, as it came under his personal observation.—*Lancet*, July 14, 1888.

Creolin as an Internal Medicine.—Dr. A. Hiller, Privat Docent in Breslau, publishes some remarks on this subject in the *Deutsche Med. Wochenschr.*, July 5th, 1888. The antiseptic properties and comparative innocuousness of creolin as used externally, have been made known by Fröhner and E. v. Esmarch, and their conclusions are also confirmed by Dr. Hiller. But creolin is of the greatest use in various diseases of the stomach and intestines. Its anti-zymotic influence comes out most clearly when employed against the numerous processes of fermentation and decompostion which accompany most, if not all, such diseases. "Its freedom from poisonous effects, and its perfectly non-irritant effects, make it an ideal antiseptic for the above group of diseases." Dr. Hiller asserts that creolin, given in strong gelatine capsules, in doses of between three and fifteen grains three times a day, promptly and certainly relieves meteorism from whatever cause, whether constriction, typhlitis, catarrh, atony, or ileotyphus, and hopes thus to prevent perforation in the latter case. It was found equally efficient in simple flatulence, gastric dilatation, acute and chronic gastric catarrh, and diarrhœa. Given in a case of tænia and one of oxyuris, its action was prompt and efficient as an anti-parasitic. But creolin appears unfitted for children, owing to their inabilty to swallow capsules. Creolin may also be used irrigate the rectum in carcinoma cases; used thus in solutions of 1 in 500 it acts like a charm in purulent cystitis (Jessner, *ibid.*, 1881). This glowing account by Dr. Hiller ought to call attention to this substance.—*British Medical Journal.*

Pasteur's Honors.—A calculation has been made of the number of decorations with which M. Pasteur has been honored by various Courts and States throughout the world. It seems that he is the owner of fifteen orders, of which only one is French. In addition he is an honorary doctor of all the great Universities of Europe, and a member of eighty-three learned societies. Such a record as this is proof of the extent to which his work has been appreciated. It has probably fallen to the lot of few *savants* to have experienced during their lifetime so full a recognition of their scientific labors as has occurred to M. Pasteur. The rewards of science are often tardy in their appearance, and their bestowal frequently comes too late in the day to be of any actual service. When, therefore, an exception to the rule occurs it is worthy of notice.—*Med. Press.*

Pathogeny of Paralysis Agitans.—Many arguments in favor of the view that paralysis agitans is really an organic disease of the spinal cord are adduced by M. Teissier in the *Lyon Medical*, No. 28. Jaccoud maintained that the muscular tone derived from the nervous energy of the spinal cord was lost, whilst Grassett held a hypothesis, not easily understood, based on the assumption of a want of power of sustaining a fixed position. A diffuse sclerosis of the lateral columns has been found, in some cases extending up to the vesticular column of Clarke and into the intermedio-lateral tract. One case of spinal pachymeningitis during life showed characteristic tremors, retropulsion, and psychic troubles. In this instance, fibrous invasions from the thickened meninges were detected here and there in the white columns of the spinal cord. The main conclusion to be drawn, if M. Teissier's observations are exact, seems to be that paralysis agitans is, like chorea, a symptom, and not a disease in itself.—*The Lancet*, July 21, 1888.

Medical Items.

The Mississippi Valley Medical Association will meet in St. Louis on September 11, 1888.

The Tri-State Medical Association of Mississippi, Arkansas and Tennessee will meet in Memphis on November 13, 1888.

Dr. George M. Sternberg, U. S. A., and Prof. Hirsch, of Berlin, have recently been elected honorary members of the Epidemiological Society of London.

Dr. Hermann Knapp has been appointed Professor of Ophthalmology in the New York College of Physicians and Surgeons, as successor to the late Dr. C. R. Agnew.

Dr. Karl Kilcher, of Prague, ass'stant to Prof. Hlawa, has just succumbed to the effects of an exceedingly repugnant and not over-interesting experiment. He had swallowed some blood from the body of a man who had died of typhus fever, and death was caused by septicæmia.—*Med. Press.*

The University of Bologna has granted the degree of Doctor in the Faculty of Medicine and Surgery to Dr. Hughlings Jackson, F. R. S., on the occasion of the eighth centenary of the University.

The University of Montpelier so famous for its Medical Faculty, from which Rabelais obtained his degree, and in which he lectured on medicine with much applause, will celebrate the six hundredth anniversary of its foundation next winter.

Dr. J. B. Mattison, of Brooklyn, is translating Erlenmeyer's Die Morphunnsucht und ehre Behandlung—The Morphia Disease and Its Treatment—third and last German edition, the latest and largest work on the subject, which, with notes and comments by the translator, will be brought out the coming autumn.

Evidence of the Curability of Phthisis.—Dr. Vibert, who is connected with the Paris Morgue, has stated that among two hundred necropsies which he made on persons who died a violent death, he has in as many as twenty per cent, found evidence of old tubercular lesions in the lungs, which had healed.

MM. Chauvin & Jorisenne find that iodoform is a powerful, reliable and rapid hæmostatic, and succeeds in cases where ergot has failed. They give it in pills, containing 1 grain of iodoform made up with extract of gentian or cinchona. Three to five to be taken daily.—*Med. Press.*

Professor Jaccoud recommends a copious diluent draught and an exclusive milk diet in the treatment of gout; in cases in which there is considerable fever he gives a small quantity of hydrate of bromal. Preparations of colchicine and of salicylate of soda, though excellent as anæsthetics, are to be avoided. In patients affected with interstitial nephritis these substances produce most serious toxic symptoms.

Pruritus Pudendi may be successfully treated, according to Routh (*Brit. Med. Jour.*, April 14, 1888), by bathing with a solution made by putting a teaspoonful of borax into a pint of hot water, shaking thoroughly, and adding five drops of oil of peppermint. If there are any excoriations, or if eczema is present, this will cause too much smarting, and it is better to substitute for it olive-oil, with five grains of iodoform to the ounce.—*N. Y. Med. Journal.*

Sir Morell Mackenzie has prepared a report of the case of the late German Emperor, which he will publish as soon as he obtains the consent of the Dowager Empress Victoria. It is likely that he will let loose all of his heavy guns against his German critics who have assailed his management of the Emperor's case with malicious hate and envy. There is evidently little good feeling between the German and English laryngologists.

In 1878, when there was a twenty per cent. *ad valorem* duty on quinine, 196,475 ounces were imported, for which the price was about $2.83 per ounce, and for which consequently we paid about half a million dollars. Last year we imported nearly five million ounces, for which we paid foreign manufacturers only about 73⅛ cents per ounce, or in all about $4,000,000. The decrease in price is due in part, of course, to the increase in supply from the increased culture of cinchona trees.—*Med. Record.*

The new City Hospital, now in process of erection on the old City Spring lot, adjoining the present college building, will be a handsome and commodious structure. It will be five stories above ground, with a frontage of 114 feet on Calvert Street, separated by an open court from a building of equal proportions fronting on the street in the rear. The capacity of the hospital will be 300 beds. It will have a number of private rooms in addition to the public wards. It has the most improved and perfect system of ventilation. The building will be under the exclusive control of the Faculty of the College of Physicians and Surgeons, and has been erected by the school to increase its clinical advantages.

The famous "Christian Science" case at Medford, with the facts of which our readers are familiar, has reached the end which we believe lawyers predicted, and the woman Corner, who permitted the death of her daughter and grandchild by neglect, is released. It will be remembered that the woman was arrested on a charge of manslaughter in causing the death of her daughter, Mrs. Lottie A. James, of West Medford, by neglecting to provide proper medical assistance at the time of her confinement, on April 18th. The case was heard before Judge Pettingill, of Malden, who decided that Mrs. Corner was "probably" guilty, and he held her in $5,000 for trial in the Superior Court at Cambridge. Judge Pettingill's decision was not maintained, however, by the grand jury, which has reported "no bill" against Mrs. Corner.—*Boston Med. and Surgical Journal.*

Clinical Lecture.

CLINICAL LECTURE ON DISEASES OF THE HEART AND LUNGS DELIVERED AT THE UNIVERSITY OF MARYLAND.

BY PROFESSOR S. C. CHEW, OF BALTIMORE.

(Reported especially for the Maryland Medical Journal.)

INCIPIENT PHTHISIS; PLEURAL EFFUSION; BRONCHITIS AFTER MEASLES; TOBACCO HEART.

GENTLEMEN:—I wish to call your attention this morning to a case of

Incipient Phthisis.

which has just come in. It is a woman, 22 years old and, as you see, of slight build. She complains of night sweats, loss of appetite, loss of flesh, a troublesome cough, and some expectoration. She says her grandfather died of consumption. She dates her illness from the time of her last confinement, fifteen months ago. On making a physical examination, we find slight dullness on percussion with rude respiratory murmur and a few moist rales at the apex of the left lung. This is the ordinary history of incipient phthisis, but I think the interesting point here is the development of these important physical signs in the lung after a confinement. You know very well from your observations in the lying-in-hospital, how utterly weakened and debilitated a woman is immediately after giving birth to a child.

Now a woman with a tendency to phthisis such as this woman has from her grandfather seems during pregnancy to keep up and appear well, but after weaning her child, or even while nursing it, an insidious cough and slight hectic may make their appearance and the woman in too many cases goes on to die. The prognosis is always bad as long as she is liable to have other children. Often the first thing to be done is to wean the child at once if this has not already been done. The further treatment is as in most cases of phthisis. If the bad signs be discovered, and suitable climate together with proper food and strong tonics be used, the prognosis is much more favorable.

To show how difficult it is to make a diagnosis of pulmonary consumption in its incipiency from the physical signs and history alone, I should like to show you another case. It is that of a man who complains of cough, expectoration, slight shortness of breath, and a few vague symptoms. The physical examination shows increased vocal fremitus, and slight dulness on percussion at the apex of the right lung. This may sound like a clear case of phthisis. I do not think it is phthisis at all. Most of his symptoms can be explained from other causes, and as you know, many of them would apply equally well in an ordinary case of dyspepsia. This difference in resonance on the two sides can be explained from the fact that he is right-handed, and the increased development of his right pectoral muscles calls forth the physical signs above noted. Mensuration shows a slight increase in the size of the right side, due to the increased muscular development. I only call your attention to this seemingly self-evident fact, because I believe that many such cases are diagnosticated as cases of incipient phthisis, and after treatment, are recorded as cured cases of pulmonary consumpton. This, of course, helps to render statistics less valuable, and teaches us not to put too much reliance on them. I think that the microscopical evidence of tubercle bacilli in the sputa would confirm a diagnosis of incipient phthisis, and my assistants always make this examination when in donbt. The sputa in this case will be examined and reported on later.

The third case which I wish to bring before you is one of

Pleural Effusion.

This man who is 40 years old has been sick for three weeks. He was first taken with an intense pain in the right side and had at the same time a chill followed by fever. His previous history had al-

ways been good. On inspection we notice that he has an anxious expression and is suffering from dyspnœa with a slight cough. Mensuration shows no difference between the two sides. On percussion, we find absolute flatness on the right side extending from the second rib downward to the inferior border of the ribs. The vocal fremitus and respiratory murmur are also absent over the same area. One of my assistants introduced a hypodermic syringe and drew off a clear serous fluid. It is undoubtedly a case of pleuritic effusion. I would call your attention to one very important physical sign, namely, the displacement of the apex of the heart to the left by the effusion. If this man were an inpatient, we might consider the advisability of tapping his chest and drawing off at least a part of the fluid. As it is, I consider it unadvisable to draw even a part of a pleuritic fluid off and let the patient immediately walk off. The sudden withdrawal of so much fluid from the chest has such an effect on the heart and circulation, that syncope and even fatal results might follow this operation. I think our best line of treatment will be to apply a blister of cantharides to the right side of the chest, and at the same time to give iron and digitalis; the iron in large doses. We shall at a future lecture see the result of this treatment.

The next case is one of a young man who has recovered from

Pleurisy.

The history shows that he was taken in the latter part of February or the first part of March with fever, difficulty of breathing intense pain on the left side, and a short cough. The diagnosis at the time made in the dispensary by my assistant was that of pleurisy. After the application of one or more blisters and the liberal use of tonics, he has now almost recovered. I have brought him in simply to show you some of the physical signs at this period of convalescence. Auscultation shows only a slight difference between the two sides and on palpation we find the vocal resonance only very slightly diminished on the left side; but percussion stills tells us that the parts have not returned to their normal condition. I wish to emphasize this point and it is why I show the case. After pleurisy some signs remain on percussion which cannot be heard on auscultation.

Bronchitis after Measles.

The extreme prevalence of measles in Baltimore this winter, and its unusual severity, in many cases, has not failed to attract the attention of all observant physicians. This child, whom I present to you, has had within two or three weeks an attack of measles and is now convalescing. She has the not uncommon complication of catarrh of the bronchi and it is this complication of the lungs which usually makes measles a serious disease. Pneumonia is also apt to follow and in the catarrhal form. This begins in a catarrhal process and extends from the bronchial mucous membrane to the air vesicles. The mucous membrane being continuous with the skin is affected in a manner similar to the latter and the same condition has been shown to exist in both in measles.

As to the treatment, ordinarily very little need be done. It is well to guard against exposure; use warm demulcent drinks and sweet spirits of nitre. If there is much cough, it may be allayed by a combination of muriate of ammonia with brown mixture. In such cases the physician has little to do besides keeping a careful and intelligent watch, even though it is not necessary to give a cough medicine.

Tobacco Heart.

This patient is 28 years old and gives the following history: He has complained for several months of a sharp pain in the left side, and has noticed that his heart overacts and occasionally intermits. He does not smoke but chews continually, and even chews tobacco when he eats. He formerly smoked but gave that up several weeks ago. He is able himself to see the connection between his trouble and the use of tobacco,

and ever since he has stopped smoking he notices that his heart does not act so irregularly. On auscultating his chest, the violent action of the heart is noticed and the intermission of the beat may also be perceived. Close observation reveals a short systolic murmur heard with greatest intensity at the apex, but we are hardly justified in calling it a mitral regurgitation. A murmur is the least serious of all heart signs. Patients may live to a ripe old age provided they do not exert themselves too much or make a sudden strain. These murmurs are analogous to the anæmic murmurs heard at the base. A large proportion of them are heard at the aortic area, but some are also heard at the apex. I have noticed that students think they have heard a murmur because their ears have happened to catch a sound of the heart during the respiration. The patient should always hold the breath, and thus we would eliminate the breathing sounds. An examination of this patient's urine shows no albumen. If I should find such a murmur in a life insurance examination and the patient were in other respects healthy, I should not turn him down at all. There has been too much importance attached to a murmur. It is only one element in the diagnosis. There are some murmurs necessarily serious, *e. g.* an aortic diastolic murmur, which cannot exist without serious organic disease. A systolic murmur may be an anæmic murmur heard at the base or a very slight mitral murmur, which may be due to the irritability of the heart, as in this case.

Selected Articles.

TUBERCULOSIS FROM MILK.

BY LOUIS PARKES, M.D., D.P.H. LOND.

Assistant to the Chair of Hygiene, University College, London.

That cow's milk is not uncommonly a vehicle for the transmission of infectious disease to the human subject is now well understood. The evidence in support of such a mode of propagation is in many cases incontestable. Enteric fever, scarlet fever, diphtheria, and a disease resembling the foot-and-mouth disease of cattle are known to have been spread by means of the milk supply. There is one other disease, tuberculosis, in which cow's milk has not been definitely proved to have served as a carrier of contagion; but amongst those who have made a study of the subject, the view in favor of such a mode of propagation is regarded as containing the elements of extreme probability.

Cattle are very susceptible to tubercle, and stall-fed dairy cows in towns are not infrequently found to be affected. Indeed, Professor Fleming has asserted that at least 25 per cent. of all dairy cows kept in towns are the subjects of this malady These animals are stalled day and night in stables often uncleanly or badly ventilated, they are perpetually being drained of large quantities of milk. Prolonged lactation in the human female is well known to be a frequent precursor of phthisis, and it is not to be wondered at that, under such circumstances, and with the additional factors of confinement, want of exercise, and bad air, cows should succumb to a malady to which they are in a high degree susceptible.

It has been found by experience that the best bred animals, which are also usually the best milkers, are those which are soonest affected. In the early stages the symptoms of the disease are ill-defined, the health of the animal is apparently not interfered with, and the milk secretion is as abundant as ever. It is not until the disease is well established that nutrition is interfered with; and even then, unless the amount of milk is seriously lessened, the dairy farmer continues to keep the animal in stock. So far as known at present, the milk of tuberculous cows is free from tubercle bacilli, unless there has been—as is sometimes the case—a deposition of tubercles in the glands of the udder.

It would be extremely interesting to know in what percentage of cases the mammary glands are involved in the process of tuberculization, and at what stage of the disease such involvement usually commences. Milk which con-

tains tubercle bacilli, when given to guinea pigs and rabbits, causes tubercular deposits in the lymphatic follicles lining the intestinal walls, followed by tubercles in the mesenteric glands, peritoneum, liver, spleen, and general tuberculosis (Klein). Milk which is free from tubercle bacilli, although derived from undoubtedly tubercular cows, has not so far been found to be productive of tuberculosis in calves and other animals to which the milk was given.

It may be fairly assumed that in many of these cases of primary tubercular ulceration of the intestines or of tuberculosis of the peritoneum and mesenteric glands (tabes mesenterica), which occur in the human subject, the tubercular virus has been introduced with the food, and the absorption of the virus has taken place through some part of the digestive tract. These diseases are usually primary in young children; in adults they are mostly secondary to tubercular disease of other organs, especially of the lungs. On referring to the Registrar-General's Summary, it is seen that in the ten years 1871–80, tubercular peritonitis and its allied disease, tabes mesenterica, caused amongst children under 5 years of age an average mortality of 1.55 per 1,000 per annum, which approaches closely the average mortality from measles (2.57 per 1.000) in the same period, and is more than twelve times as great as the corresponding mortality from these diseases of any other age period of five years, from the age of 5 up to 100. Primary tubercular disease of the lungs in children under 5 years of age is a comparatively rare event. The average annual mortality from phthisis of children under 5 years for the decennium 1871–80 was only 0.77 per 1,000, and that possibly some of the cases registered were really secondary to primary tuberculosis of the abdominal lymphatic system in young children, is at once seen from these figures. In the matter of dietary, there is one great distinguishing feature between this age period and all others. Under 5 years of age, milk—usually unboiled—forms the staple food of children.

Whilst not denying that the tubercular virus may find other means of reaching the digestive tract than through unboiled cow's milk, it appears to me that there are no sufficient safeguards in the management of town dairies to warrant us in assuming that milk from cows in an advanced stage of tuberculosis has no chance of being mixed with milk of other healthy cows. In every dairy of any size there will probably be tubercular cows, some of them, perhaps, with tubercular deposits in the udders; and as it is the common custom with dairymen to mix together the milk yielded by different cows, it is not too much to assume that tubercle bacilli may be widely distributed in the milk supply of any town. It has been said that the tuberculosis of cattle is not the same disease as the tuberculosis of man, and that the absence of any proof of the human variety having ever been dependent upon ingestion or inoculation of the virus of the bovine variety tends to strengthen such a belief. To this it may be replied that the bacilli of bovine tuberculosis are identical—according to all bacteriological methods at present known—with those found in tubercular formations in the organs of man, and that although the disease presents anatomical differences in man and cattle, these differences may be explained as being due to differences of soil in the human and bovine tissues, the bacilli ingrafting themselves in those tissues, which present conditions most favorable to their growth and development. Secondly, absence of proof may only mean want of observation or recorded data and cannot be held to imply that at no future time will satisfactory evidence of the dependence of the human disease upon a bovine source be brought to light.

Having regard to all these considerations, surely the time has arrived when a radical change in the present methods of milk production and milk consumption is urgently needed. In the first place it should be rendered illegal for cows known to be suffering from tuberculosis to be kept in stock by dairymen and farmers for milking purposes; and secondly, in no household should unboiled milk be consumed, more especially by

children. No other animal food is consumed by civilized nations in an uncooked state; and by light of our recently acquired knowledge, it would appear that there is as much, or more, danger connected with the practice of drinking unboiled milk as of eating raw flesh.

Exposure to the heat of boiling water for five minutes destroys the life and action of the tubercular virus (Klein); and the same is true of the other specific disease poisons. By such simple means, then, is it possible to guard against an ever present source of danger, as well as to obtain protection from those possibilities of the introduction into our bodies of the viruses of enteric fever, and the like, which the experience of past epidemics has taught us to be latent possibilities in milk, with powers of development at the most unexpected periods? If medical practitioners generally recognized the importance of these views, and were careful to enforce them upon those entrusted with the care of delicate children of scrofulous diathesis or with hereditary tendencies to tubercle, a commencement would be made in the right direction, which would gradually extend itself through all classes of society.—*British Med. Journal.*

Hospital Report.

REPORT OF THE PRESBYTERIAN EYE, EAR AND THROAT CHARITY HOSPITAL, FOR SIX MONTHS, ENDING JUNE 30, 1888.

Cases of Cataract Extraction Without Iridectomy.

BY HIRAM WOODS, M. D., ASSISTANT SURGEON.

There were received at the hospital during the first six months of this year 4,176 patients. These made 15,979 visits to the hospital, the average daily attendance being 102. The whole number of operations performed on the eye, ear and throat was 754. Some of these were: Removal of senile cataract, 38, traumatic, 2; needling of congenital cataract, 6, secondary capsular, 11, immature, 1, traumatic, 1; iridectomies, 26; enucleations, 16; optico-ciliary neurotomies, 6; evisceration, 1; opening of mastoid abscesses, 4.

Of late years there has been a tendency on the part of eye surgeons to return to the operation of simple cataract extraction, *i. e.* without iridectomy. In this country, Dr. Knapp, of New York, has reported a series of 100 cases (Archives of Ophthalmology, March '87 and '88). His visual results were excellent, 96 per cent. obtaining good vision (21 cases having $\frac{20}{20}$). Only one eye was lost—a patient who had diabetes and chronic dacro-cystitis. There are some advantages in the simple extraction, among which is the preservation of the natural appearance of the eye, with a central pupil. Dr. Knapp also thinks that in "simple extraction" the acuteness of vision is greater, that *eccentric* vision is better, and that there is less danger of "morbid conditions being transmitted to the most vulnerable part of the eye, the ciliary body," as "threads of the capsule and iris—the parts nearest these bodies—are not so liable to be locked up in the wound." Among the disadvantages of the operation pointed out by Dr. Knapp may be mentioned the greater difficulty in the technique and the occurrence of prolapse of the iris, and of posterior synechiæ. In the performance of the operation, (a) the section must be larger, because allowance must be made for the room the iris will occupy; (b) There is danger of the iris falling before the knife unless the section is rapidly performed; (c) the expulsion of the lens and (d) cleansing the anterior chamber of cortical substance are much more difficult than in combined extraction. Finally, Dr. Knapp considers the following to be the indications for an iridectomy, either during or after the extraction:

(a) When, in cases of rupture of the suspensory ligament and fluidity of the vitreous, the lens, on pressure, does not present in the wound, but only vitreous escapes; (b) when the attempt to expel the lens has pushed the iris into the

wound, and vitreous escapes—a condition caused by an insufficient section; (c) when the iris has been bruised or injured during the operation; (d) when the sphincter of the iris is unyielding; (e) when the iris, after the completion of the operation, is irreducible.

During May and June there were performed at the Presbyterian Eye Hospital 17 simple extractions. In all of them, the operation was performed in the operating room, cocaine was employed, and the eye was carefully and thoroughly washed with a solution of biniod. hydrarg. (1 to 20,000) before and during the operation. Except in one instance—a half-witted negro—the after-dressing was the isinglass plaster in ordinary use at the hospital, and in only three cases were both eyes closed. All the patients walked from the table to their rooms or wards immediately after the operation. An iridectomy was performed in three of the 17 cases after the cataract had been extracted—once, because the iris was bruised and a ragged pupil was left; again, in a case of traumatic cataract with a cut iris—where the injured portion of the iris was excised, while the third iridectomy was done because the fellow-eye showed retinal hemorrhages through a cataractous lens, and the operator suspected a glaucomatous trouble. In the performance of the operation, an attempt was made in most cases to remove a piece of the anterior lens capsule with forceps instead of using the cystotome. In the expulsion of the lens, there was usually a large prolapse of the iris. In some cases this went back spontaneously, while in others the iris was replaced with a spatula. In only one case was an injured or bruised portion of iris left. Here there was a distinct tear between the pupillary and ciliary borders. It did no harm, and the patient had—two weeks from the present writing—$\frac{20}{20}$ vision, with clear, round pupil. After the cataract has been removed, the anterior chamber, of course, collapses, and with the iris intact, it is difficult to remove cortical substance from the pupil. Panas lays great stress on the necessity of doing this completely. He washes the particles out with an antiseptic fluid, if they won't come out any other way. Particles of cortical substance were left behind in two or three of the cases at the hospital. In only one did they seem to do harm. This patient had considerable pain during convalescence, and when the strips were removed on the fifth day there was a small iritic protrusion, with opaque pupil, from cortical substance. In this, as in the other case of protrusion, the iris had been replaced before the patient left the table. The final step in the operation was the instillation of a 1 gr. solution of sulphate eserine. Of the 14 cases left without iridectomy, the general result was: 12 recovered without accident or complication, and had good pupils, except capsular deposit seen in three or four. In two there occurred during convalescence protrusion of the iris. One of these was further complicated by having closed pupil, as already described. The other saw well enough to walk alone, and his hernia caused no pain. He has a mature cataract in the other eye.

The visual results were:

1 $\frac{20}{20}$.
1 $\frac{20}{40}$.
7 $\frac{20}{70}$.
1 Nothing. Patient with closed pupil above.
1 Walked about alone; mentioned above.
1 Had no light perception before removal of a traumatic cataract. He saw nothing, although pupil was clear.
1 Saw clearly objects in yard. Couldn't read. Vision estimated $\frac{20}{40}$. The negro mentioned above.
1 Left before vision was recorded, but saw objects clearly.

Correspondence.

PARIS, July 20, 1888.

There are many who are disposed to criticise the work which emanates from the school of *Charcot* at the Salpêtrière, but if one follows for a time the teaching there, the conclusion is almost inevitable that it is the greatest school of neurology in the world. *Charcot* and his colleagues have labored for years to

make the Salpêtrière a centre of clinical neurology, and they have attained a most brilliant success. *M. Charcot* gives a clinic every Tuesday morning in the large amphitheatre, selecting from his wonderfully large material cases to illustrate phases of a certain affection, or to accentuate the differential diagnosis. Every morning he has a consultation to which special students go, where the new cases are examined. One meets students of all nationalities here. There are quite a number of Americans, many Italians, Spanish, Portuguese, Greeks &c. Germany, of course, is not largely represented.

Charcot is very fond of the study of cases by comparison, a method which is applicable only at an institution of this kind, where the material is practically unlimited. For example, he will bring in several cases of athetosis, and compare them with *chorea vulgaris*, Huntingdon's disease, paralysis agitans, and the like. The great feature of the Salpêtrière is the number and variety of hysterical cases. There are two or three wards devoted exclusively to this disease, for it is a disease, and one may see at almost any time the "grand movements" which have been so graphically depicted by French writers in their descriptions of hystero-epilepsy. As soon as one of these patients is seized with a convulsion, the nurse, or some patient standing by, makes forcible compression over the ovary, which usually terminates the attack, and a compress, or rather a truss, is put on and worn for a time.

Most of these patients have *hysterogenic zones*, pressure upon which will provoke some hysterical manifestation, either an attack of hystero-epilepsy, or certain forced movements, as beating the foot or striking the arm against the side, so it is very easy to procure a clinic at any time. One is at first inclined to suspect that these are merely trained patients, but after seeing how very strongly they object to being set going by pressing upon the hysterogenic center, it is evident that the condition, whatever it is, is at least genuine. The cases of hysterical paralysis and contractures are numerous and interesting. One young woman who had been treated for more than a year by a cumbrous apparatus for Pott's disease, and had been operated on twice (section of the nerve) for blepharospasm, was brought to the Salpêtrière and the diagnosis of hysterical contracture made, and she is recovering rapidly. I have seen here cases of hysterical paralysis simulating (and sometimes almost perfectly) nearly every variety of organic paralysis.

To make the differential diagnosis the patient is sometimes hypnotized, sometimes anæthetized, when the contracture disappears, only to return when consciousness is restored. The treatment is by massage, electricity, tonics, etc. Of course, in hospital it is difficult to treat this malady by Weir Mitchell's plan, which is applicable in many instances. Among other forms of hysteria one sees here, not infrequently, hysterical mania, and there is a case in the wards just now which is very pronounced. The patient, a woman, about 35 years old, evidences a variety of hallucinations, rushes about the ward, runs out in the large yard, screams, gesticulates, carries on imaginary conversations, etc. for days at a time. A few days ago, M. Charcot, noticing her in one of her paroxysms, hyptonized her, and she was carried to her bed and allowed to sleep for hours to the great relief of herself and the other patients.

The subject of hypnotism has run riot in Paris, and a great many experiments are being daily made with it. Those very remarkable publications of Dr. Luys on the subject of "suggestion at a distance" are not very generally credited here. His experiments of producing the effect of a drug, alcohol for example, by holding a small phial of it near the patient, is very hard to believe, and is difficult of explanation, unless one accepts the very simple and probable solution that the effect the drug is to have is in some manner suggested to the patient.

The Charcot School, it seems to me, have taken the most credible position in regard to hypnotism. They hold that it is applicable, in its highest degree, at least, only to hysterical subjects, and that the diseases, such as neuralgia, sciatica,

chorea, and the like, that are cured by it are, in fact, hysterical examples of these affections. The kinship between hysteria and the hypnotic state becomes very apparent when one examines these hysterical patients at the Salpêtrière. Such phenomena as the production of rigidity, of contractures, of uncontrollable movements, and the like, which are so well known in the hypnotic condition, can be readily produced in these patients without invoking the aid of hypnotism. A sudden extension of the arm renders it perfectly rigid, or by pressing firmly on the flexor muscles of the forearm, a contracture of the hand takes place, which lasts for a long time unless the opposite muscles are greatly excited by rubbing. Hypnotism is put to practical use here constantly. A patient who is not able to sleep is hypnotized and allowed to sleep for 12 or 24 hours. If one of the hystero epileptics feels the prodromes of an attack long enough beforehand, she is hypnotized, and the paroxysm thus averted. I cannot help thinking that the statements that have been made by some experimenters, those especially of the school at Nancy, in regard to the general applicability of hypnotism are incorrect. Certain it is that it is quite impossible to produce this state in a large number of patients who come to the Salpêtrière.

The lectures and clinics stop about the end of July in Paris, and begin again in October. One is free to choose his instructors and can attend any lecture or clinic without fee, the hospital being under governmental control and the attending physicians members of the faculty. There is a perfect deluge of medical literature in Paris, and a day hardly passes that a new book does not see the light. The hospitals, as a rule, are dirty and the nurses likewise, quite a striking contrast to the neatness always seen in the London institutions. I saw one of the most celebrated surgeons of Paris operating in a dress suit, surrounded by slovenly nurses, and in a very dirty amphitheatre. Undoubtedly, one of the great reasons why the men in Paris and London attain such eminence is the great profusion of clinical material they have at their command. The pauper class is, of course, much larger than in America, and in addition to this many persons are willing to go to consult a distinguished man at a clinic, who would not think of doing so with us. Then, too, the hospital physicians and surgeons devote much more time to their work at the hospital than our men are willing to do. *M. Charcot*, for example, with his world-wide reputation, spends several hours every day at the Salpêtrière.

One certainly has many advantages here, and a number of students whom I have met, who have studied both at Paris and Vienna, are inclined to give Paris the preference.

With kind regards to the JOURNAL,

Yours truly,

GEO. J. PRESTON.

5 Rue Rollin, Paris.

A CORRECTION.

Editor Maryland Medical Journal.

DEAR SIR:—In your editorial on the Thomas Wilson Sanitarium, a mistake was made in the dose of resorcin. As this is a toxic remedy, I am afraid the dose given may lead to trouble. Please make the correction: read gr. ½ instead of gr. ii.

Yours sincerely,

W. D. BOOKER, M.D.

INCOMPATIBILITY OF THE IODIDE AND CHLORATE OF POTASSIUM.—It is generally taught that iodate of potassium is likely to form when iodide and chlorate of potassium are given stimultaneously. As the iodate is a very poisonous salt, this would be a very serious occurrence. According to some careful observations by Drs. Chuche and Desprez bearing on this point, it would seem that the fear is unfounded, at any rate under ordinary circumstances. In no case were they able to produce even a trace of the salt under the most favourable conditions of temperature and environment.—*Medical Press.*

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BALTIMORE, AUGUST 11TH, 1888.

Editorial.

THE DOCTOR GOETH A SUMMERING.—

"Then came the jolly summer."

The summer time hath come, the joyous tide of liberty and relief. The wearied Aesculapian, oppressed by a twelve month of responsibility and care now leaves patients and books for a brief season and goes whithersoever his fancy, his means—his necessities—lead him. The choice of a destination does not alas! always rest with him, so that the manner and the place, how and where, he shall pass his holiday, will vary almost *ad infinitum*.

With some it may be only a transfer of labors to another locality; but even this will allow needed rest and leisure and the change will prove grateful, as bringing one out of the rut of professional life and into contact with new people and new modes of existence. And if the receipts correspond at all adequately to the recipient's wishes, he will doubtless feel amply compensated for such restrictions as he must submit to.

If at liberty to choose, valley, mountain and sea offer their attractions. One will seek recreation in rural scenes, amid the quiet repose of sweet scented flowers and shady trees, where the mind may gather strength, and "think down hours to moments," in dreamy communion with nature, or listening to "mighty winds that sweep the skirts of some far-spreading wood of ancient growth," or feasting his intellectual vision on glorious scenery, where "admiration feeding at the eye and still unsated dwells upon the scene." Various are the attractions which the country offers. The "patient fisher," who "eyes the dancing cork and bending reed," finds his greatest temptation in the crystal streams, which "wear the shadow of his line," or the "soft-flowing river" where the finny tribe await the alluring bait. The chase has charms for others of a more martial turn of mind. Such surroundings have their attractions not only through early association, but also by contrast with their opposites. The "Tu Tityre recubans," that pastoral symphony of Virgil, has been echoed by many a poet since and strikes a sympathetic chord in many a bosom still.

Others again turn towards the sea, and find new life in its refreshing breath and invigorating surf, and music in the "dash of ocean on his winding shore." Nowhere are the scenes more enlivening, whilst dead indeed must be the soul that does not find infinite variety and ever fresh interest in the foam-capped waves.

Travel has superior charms for some and it is not hard to get up a genuine enthusiasm on reading the delightful "recollections" of that veteran traveler, Sir Henry Holland, who eight times crossed the ocean to America, twice visited Iceland and many times the continents of Europe and Asia. For one of social turn, who can appreciate novelty in scene and place and has the resources of a well trained intellect to aid him, no enjoyment can equal that of travel.

Even a touch of danger is not without an exhilarating relish for some and there have been those who have found their highest realization of enjoyment in climbing the snowy summits and glaciers of Switzerland. One of these (Dr. R. Maclaren) has given a description of Alpine climbing in the *Edinburgh Medical Journal*, so

graphic, so realistic, that while reading it we almost breathe the frosty air of the mountain, we almost see the white summit looming up above the clouds, and grasp the rope that binds us for safety to our comrades, as we cross a treacherous crevasse. The dangers he does not attempt to conceal, but they are largely preventable, as an analysis of 80 accidents recorded since 1859, demonstrates. "From this, it appears that accidents from slipping on rocks or grass are the most numerous; probably unsuitable boots are the most frequent cause. But in too many cases imprudence or carelessless is the source of mischief. In 16 accidents the climbers were not roped together; in 28, the tourists were alone, or unaccompanied by a guide; unfavorable weather caused 14 accidents; in 9 cases the climbers were fastened together at spots, where the fall of one would be sure to bring all; and in 22 cases, complete ignorance of the condition of the snow was the main cause of accident." "This is no doubt a heavy death roll; but when you take into account the great number due to preventable causes, the risk run by anyone who acts cautiously and wisely, and is fit for what he attempts, is a small one indeed. I hold that the test of justifiable risk in sport is—will fitness, experience and caution, very materially diminish it? If the risk is one inherent in the sport itself—if it is like the bullet in the battlefield, perfectly indiscriminating—if the man of experience and long practice runs the same chance of injury as a mere beginner—that is a sport for every prudent man to avoid. But such is not the case with Alpine climbing. Eight-ninths of the accidents are notoriously and confessedly avoidable, and even among those classed as not preventable, prudence can diminish the risk. For instance, avalanches are noted as unpreventable, yet a man who knows mountains has a good idea where avalanches are likely to fall, and avoids these places. So with falling of rocks and ice. Firm rock or firm ice will not fall, and it is generaly possible to form a fair idea of where they are not firm. But you may say, what about the risks of the learning stage? Here, again, prudence comes in; and if you are not experienced yourself, take care to put yourself in the hands of experienced men, and moreover, have sufficient for the work. Get competent guides and trust them. For my own part, I have had no experience of danger."

The attractions of Alpine climbing lie in "many things immediate and remote; in the satisfaction of having encountered difficulties and overcome them; in having undertaken arduous labor and accomplished it; in the weird beauty of the snow-clad peaks touched by the first rays of the rising sun, gilding them with a delicate and tender radiance, which words and the painter's brush alike fail to convey; in the awesome bergschrund festooned with icicles like huge stalactites of alabaster, and hollowed into deep shadows and gruesome caverns; in the deep crevasse filled with a blue light of fairy-like delicacy; in the dark blue sky, the pure air and ice-cold water, in the awe-inspiring rushing of the avalanche; and remotely in the strengthened muscles and invigorated appetite, in the general feeling of body and mind fully fit for all work which their capacity allows; and lastly, let me say, in the recollection of a comradeship closer than the absorbing labors and cares of every day life allow, which not only shared every toil and every pleasure, but materially diminished the first, and formed no small portion of the last."

In whichever of these or other ways the reader may pass his vacation, we trust that he will realize his ideal of enjoyment and return at its close with fresh vigor and new resolution for the work of another year.

NAMING THE BABY.—A medical friend relates the following incident which happened in his experience lately. In a certain locality in the northern part of the city known as "Meddlesome Row," a young woman was confined and be-

came a mother. The family were in a quandary for a name and requested the physician to suggest one. A little reflection brought to his mind the verse, which he had met in some periodical—

"Miss Pallas Eudora Von Blurkey,
High Spanish and Greek
She can fluently speak,
But cannot tell chicken from turkey."

He recognised at once that this high sounding classical title was the one they wanted. He proposed it and it was accepted with expressions of hearty approval. He has no doubt that the name "Pallas Eudora" or its equivalent abbreviations will become a familiar one in that locality. We mention the incident for the benefit of our friends who may be similarly situated.

Memoirs.

MEMOIR OF WILLIAM E. A. AIKIN, M. D., LL. D., LATE PROFESSOR OF CHEMISTRY AND PHARMACY IN THE UNIVERSITY OF MARYLAND.

BY EUGENE F. CORDELL, M. D.

From the frequent interviews I have had with Professor Aikin, and from the perusal of a large part of his official correspondence while he was Dean of the University, I feel that I knew him better than many others who appeared to possess a closer intimacy with him.

Professor Aikin was a native of the State of New York, and an alumnus of the celebrated Renssalaer Institute on the Hudson. He early exhibited a taste for scientific pursuits. Although he does not appear ever to have attended lectures in a medical college, he practiced medicine for a brief period in his native state. This proving uncongenial, and doubtless unremunerative, he turned his attention to natural science, particularly to chemistry and geology. Not long after his arrival in Baltimore, he was appointed to the chair of natural philosophy in the newly-organized Faculty of Arts and Sciences of the University of Maryland. In 1836 he first became connected with the medical department as the assistant of Prof. Ducatel, the then professor of chemistry. In the spring and summer of 1837, he was employed as geologist with a party who were investigating the mineral resources of Southwestern Virginia. It was while he was thus engaged that he was called to the chair of chemistry as successor of Prof. Ducatel, who had resigned. He belonged to the Regents' Faculty, which, after a subjection of twelve years to the illegal usurpation of the State, at this time broke loose from the trustees who had governed it, and instituted suit for the recovery of the property and franchises of the university. The position did not then possess the attractions it had previously or has since offered. Prof. Aikin has himself told me that his lectures during the memorable sessions of 1837–8 and 1838–9 were delivered in what had been a barber shop of the old Indian Queen Tavern, and that the last of these years his class numbered but thirteen students. He shared in the struggle during that dark and gloomy period of the University, and to his steadfastness, self-sacrifice and devotion to the interests of the institution, is due, in large degree, the restoration of its prosperity. From 1840 to 1841, and again from 1844 to 1855, he discharged the onerous and unsalaried duties of Dean, and the amount of extra labor which this office imposed can hardly be appreciated, even by his successors in office. In 1883, the burden of years and the need of repose after his long and laborious career led to his resignation. He was appointed Professor Emeritus, and in consideration of his eminent services to the institution, the faculty voted him an annuity during life.

Although at the time of his decease he had reached the great age of 81 years (having been born by a coincidence the same year in which the university—where so much of his life had been spent—was founded), he was still erect and unbent by years. He was a man of fine and commanding presence, 6 ft. 1 inch in height, and weighed over 200 pounds. He had a large head, a high and broad

forehead, and wore glasses on account of nearsightedness. His long, flowing, white beard gave him a most venerable appearance, suggestive rather of some ancient philosopher than of a modern savant. His voice, owing to the loss of his teeth, had for many years been weak and indistinct, and this operated much againt his efficiency as a lecturer. He took great pride in his experiments, and it was extremely uncommon for him to fail in them. He was very systematic and industrious. He was neat in his dress, and his habits were simple and free from excesses of every sort. He was modest and retiring in disposition and disliked publicity, but never shunned responsibility, and was courageous in maintaining his convictions. His self-reliance and fortitude, under the most trying circumstances, have caused his friends to refer to him as "the old Roman." Whilst firm and decided in his views, he was free from feelings of malice or envy, and never, to my knowledge, indulged in detraction of others, no matter how great the aggravation. I was particularly struck with this trait in his character during my frequent interviews with him.

Whilst perhaps not a *great* chemist (in the sense of originality, I mean), he was a scientist of very high attainments. His knowledge of his profession was extensive and exact. He had a good deal of quiet humor and varied the necessary tædium of his lectures with frequent mots and anecdotes.

He was a devoted, though not bigoted, Catholic, and attended strictly to his religious duties. On the very morning on which he died, he had given directions that he should be called at an early hour in order that he might attend mass. He seemed to be desirous to be in constant readiness for the last summons whenever it should come.

He had not to contend during his last years, like some of his early colleagues, with the pangs of poverty. His position as "City Inspector of Gas and Illuminating oils" together with his annuity, gave him a more than ample income for all his personal wants. His income from the two sources was $2,000. He had only himself to provide for, his wife having died some years ago, his two surviving sons being grown and self-supporting, and his only daughter being a sister of charity. There is strong ground for believing that he gave away in charities the larger part of his income. He lived so economically and abstemiously that he could not have expended more than a small portion of it, and yet he left nothing. I was led by these considerations to made inquiries since his death, and was convinced that he was in the habit of giving large sums to various charities and to individuals who appealed to his sympathy, without revealing their source. A lady relative of his tells me that she has frequently seen him drop a roll of bank notes in the charity boxes. Thus unostentatiously did he obey the injunction of the scripture "not to let the right hand know what the left hand doeth."

His death was sudden and unexpected but such as he had desired. Having retired in his usual health and as far as known not being subject to any organic disease, he was found dead in bed early on the morning of May 31st, 1888, in his room on Courtland Street, where he resided.

He was twice married and by a strange coincidence had fourteen children by each wife. But three of these survive, only one of whom—Sister Ignacia of Mt. de Sales Convent, near Catonsville—resides in this state.

Besides the positions mentioned above, Prof. Aiken had held similar places in the Maryland Institute and in other colleges. He was a member of the American Association for the Advancement of Science, of the American Medical Association and of the Medical and Chirurgical Faculty of Maryland. Although so long estranged from strictly medical pursuits, he manifested his interest in the medical profession by continuing his membership in medical societies up to the date of his death. He had been a member of the convention for revising the Pharmacopœia and he took a leading part in the proceedings of the "Maryland Academy of Science and Literature." As chairmann of the committee on Botany of the lat-

ter, he contributed a list of plants found in the vicinity of Baltimore, which still serves for reference for those engaged in that pursuit. He was the author of a number of scientific papers written mostly during his early career. Of these several were upon geological and mineralogical subjects and appeared in Silliman's Journal. Two of his introductory lectures at the University viz.: in 1837 and 1840, were published by his classes, and elicited the encomiums of the medical press of the day. He also contributed to the *Maryland Medical and Surgical Journal.*

Nothing will show better Prof. Aikin's modesty than a brief sketch of his life which he prepared at my request some years ago. Who of us writing such an account would indulge in so little of egotism and self-laudation?

Dr. Aikin though a native of New York has been a resident of Maryland since 1832 and first became connected with the University by acting as assistant to the Professor of Chemistry during the session of 1836-7. Prof. Ducatel resigning that chair in the summer of 1837, Dr. Aikin was elected in October of the same year to fill the vacancy and has discharged the duties of the place uninterruptedly ever since. He commenced his professional life, in common with a vast majority of medical men at that day, as a licentiate receiving his license from the New York State Medical Society.

Soon after commencing practice he received the Honorary Degree of M.D. from the Vermont Academy of Medicine and more lately (in 1843) he was complimented with the Degree of LL.D. by the President and Faculty of Georgetown College.

His career as a practitioner of medicine was very brief. A distaste for the drudgery of a country practice co-operating with his early predilections for natural science soon determined his choice to throw physic to the dogs and begin life as a teacher of science. In this occupation he has been laborously engaged for nearly half a century, apparently finding it as full of interest now as when he first commenced. Any success he may have met with he claims must be referred to the principles inculcated by his preceptor in science, Prof. Amos Eaton, A.M., LL.D., of the old Renssalaer Institute, whose pupils were taught that experimental science could not be learned without the aid of experiments to illustrate its propositions, and that the most simple apparatus was best for this purpose as least likely to confound the means with the end."

Miscellany.

Dr. Edward Warren on Prof. Charcot.—Dr. Charcot has just returned from a protracted professional visit to the Emperor of Brazil, who has been very seriously ill at Milan, bringing with him fresher laurels and a still greater renown. The reputation which he has achieved, not only as a scientist, but as a practioner of medicine, is something phenomenal. His office is daily thronged with patients from every quarter of the globe, and he is frequently called upon to make professional visits to every country of Europe, and even to Africa.

During the last six months I have been brought into intimate relations with him by having had him as regular consultant in a case of threatened insanity in a child, and during that period he has, to my personal knowledge, been called twice to England, twioe to Spain, once to Russia, once to Italy, twice to Algiers, and a great number of times to the provinces of France. Although he has not the appearance of a robust man, his absolutely regular life has secured for him perfect health, and he has, consequently, great powers of endurance. Besides, these long journeys really secure for him a certain amount of repose—a relief from the intellectual and physical tension to which his immense *clientèle* and professorial duties continuously subject him at Paris. His recent visit to Dom Pedro was perhaps the most memorable of his career, for his patient was an emperor, his colleagues were the most noted physicians of Italy, his treatment was a miracle of appropriateness and efficacy, and he received a princely fee—the sum of forty thousand francs, in addition to the expenses of his journey. And yet, when I first knew this remarkable man—and it seems but yesterday—he was an humble *chef de clinique* in Piory's service at La Charité, only too happy to supplement his modest salary by the fees derived from instructing a class of American students.

What has wrought this wonderful transformation in his fortunes? Not the influence of family and friends, for he had neither Not fortune's caprice nor

favor's wantonness, for they do not seek their favorites in the lonely garrets where the children of the people dwell. He has conquered in the struggle of life simply and exclusively because of the possession of that combination of high aspiration and fixedness of purpose which inspires a contempt for opposing obstacles, and a determination to succeed so intense and absorbing as to become *per se* at once an earnest and a guarantee of success.

The light which has illuminated his pathway and guided him to fame and fortune has been that of the midnight lamp, which, with unfaltering persistency and courage, he has kept trimmed and burning, until its rays, commingling with those of the morning, have dissipated the darkness and ushered in a day brighter and more glorious by far than he had hoped to behold even in the most sanguine hour of his young ambition's dream.

Reverting to the subject of fees, I must say that he is never extravagant in his charges, being satisfied with forty francs in his office, sixty francs for an ordinary visit, and one hundred francs for a consultation with another physician. He sometimes, however, receives very large sums from his princely patients, it being the custom here to make no fixed charge against people of rank, but to leave the matter to their sense of justice and sentiment of generosity.—*Gaillard's Med. Journal.*

A Collapsed Druggist.—"I want some consecrated lye," he slowly announced as he entered the store.

"You mean concentrated lye," suggested the druggist as he suppressed a smile.

"Well, maybe I do. It does nutmeg any difference. It's what I camphor, anyhow. What does it sulphur?"

"Eighteen cents a can."

"Then you can give me a can."

"I never cinnamon who thought himself so witty as you do," said the druggist in a gingerly manner, feeling called upon to do a little punning himself.

"Well, that's not bad, either," replied the customer, with a syruptitious glance. "I ammonia a novice at the business, though I've soda good many puns that other punsters reaped the credit of. However, I don't care a copperas far as I am concerned, though they ought to be handled without cloves till they wouldn't know what was the madder with them. Perhaps I shouldn't myrrh-myrrh. We had a pleasant time, and I shall caraway—"

It was too much for the druggist. He collapsed.—*Detroit Free Press.—Medical Herald.*

Foreign Bodies in the Rectum.—Mr. D. H. Goodsall, Assistant Surgeon to St. Mark's Hospital, has published "The Notes of Twenty Cases of Foreign Bodies in the Rectum," in the twenty-third volume of the *St. Bartholomew's Hospital Reports*, recently issued. From a consideration of these notes, the author concludes:—1. That this form of accident is more commonly met with after 35 years of age, the average age in the twenty cases being upwards of 42 years. 2. That a bone takes from one to nine days to pass from the mouth to the rectum. 3. That the pain in the rectum comes on suddenly while the motion is being passed. 4. That there is constant pain and discomfort in the rectum, and sometimes also in the adjacent parts from the time of puncture until the foreign body has been removed. 5. That the site of the puncture is within the last inch or three-quarters of an inch of the rectum. 6. That when an abscess follows the puncture, it begins to form within two or three days of the puncture. That when the case is seen early and the bone promptly removed, no ill effects follow the puncture. 8. That when a fistula has formed, the patient may, unless the internal opening is large, be cured by making only a free external opening. 9. That when it is necessary to lay open the fistula, the wound made (the foreign body having been removed) heals much more rapidly than the wound does in non-traumatic cases of fistula. The cause of fistula is very important in cases of candidates for life-insurance, for if the fistula be of traumatic origin, no increase should be made in the rate of

premium because of such a fistula. An ischio-rectal abscess, caused by a foreign body, should be opened as soon as possible. When the case is seen soon after the foreign body has punctured the rectum and before abscess has formed, the patient should be put under chloroform and the sphincter forcibly stretched. The foreign body should then be removed, either from the rectum or by an external incision. Then about two drachms of unguentum cetacei should be introduced into the rectum. The bowels must be kept confined for three or four days, and then relieved by olive oil, not by aperients.—*British Medical Jour.*, July, 1888.

Therapeutic Value of Saccharine.—I am convinced that diabetes is not necessarily a fatal disease, but that, on the contrary, many cases are curable and a large majority can be kept in abeyance during an ordinary life-time, provided that those afflicted with it have the courage and determination to adhere with absolute fidelity to the necessary regimen and treatment. These favorable results have become the more assured since the addition to the dietic list of a perfect substitute for sugar, which, as you know, has hitherto been the great *desideratum* in the therapeutics of diabetes. Few greater boons have been conferred upon suffering humanity than the discovery of saccharine, a substance which, notwithstanding the teachings of worms and the warnings deducible from its rejection by bees and wasps, is absolutely innocuous to the human system. And I will even go a step farther and say that, although it passes intact through the system, a recent case convinces me that during its passage, either by directly modifying the glycogenic function of the liver, or by exerting a catalytic influence upon the forming glucose, it diminishes the amount of sugar actually eliminated, and hence becomes a remedy, and a potent one, in the treatment of diabetes.

Nor is the value of saccharine limited to the treatment of diabetes. It pays a rôle scarcely less important in the therapeutics of gout, rheumatism and certain forms of dyspepsia—in all diseases, really, wherein sugar is contra-indicated—while it enables the druggist to improve the flavor of his mixtures without altering their properties or rendering them sources of disturbance to the stomach.—Dr. Edward Warren, *Gaillard's Med. Journal.*

Colchicine Poisoning.—M. Houde, a Paris pharmacist, while experimenting with crystallized colchicine, accidentally swallowed a quantity of a solution estimated to contain several centigrams of the active principle. He abstained from all treatment, and observed the effects. They were characteristic. Five hours after taking the colchicine he began to experience intense headache, with a feeling of heaviness on the stomach, which he compared to the pressue of a forty-pound weight. Vomiting next appeared, recurring fifteen times, and consisting successively of alimentary, mucus, and bilious matters. Alternating with these, violent purgings were experienced, repeated some twenty-five times during the night, and composed of semi-liquid, horribly fetid stools, preceded by colic and painful tenesmus. The whole was accompanied with profuse sweating, tremors, cold and numbness in the extremities. Finally, overcome with fatigue and nearly swooning, the patient went to sleep. He felt very weak for several days, but recovered without treatment.

The Contagiousness of Cancer.—Facts have already been presented which tend to prove that cancer is contagious. So far the evidence is presumptive but it is quite probable that in the near future it will be changed to certainty.

Dr. Budd writes the *Lancet* that a patient of his who had epithelioma of the lip and refused operation, owned a terrier dog that was in the habit of licking his face. The dog contracted the cancer of the tongue and died before his master. Dr. Clemon has seen in the Royal Hospital at Liverpool a patient with cancer of the penis and testicles, which was most likely contracted by sexual intercourse with his wife who

suffered from cancer of the cervix uteri. A case is reported of a lady having cancer of the neck of the womb and vagina, who was nursed by a robust servant, who washed all the soiled linen. Six months after the death of the mistress, the servant was received into a hospital with cancer of the axilla of which she died.—*Weekly Medical Journal.*

Antiseptic Method of Treating Burns and Scalds.—Prof. S. W. Gross, of Philadelphia, suggests the following as by far the most efficient and painless method of managing burns and scalds. It is that practiced by Mosetig Moorhof, and it is the one invariably employed by Prof. Gross. The vesicles having been opened and excised, the entire burnt surface is smoothly covered with dry compresses of 20 per cent. iodoform gauze, over which gutta-percha is placed. The whole is then surrounded by a thick layer of sterilized absorbent cotton between layers of corrosive gauze, which is secured by a roller with a moderate degree of pressure. Such a dressing rapidly relieves pain, prevents contact of air and infection by septic pus, and by its permanence, keeps the part at rest. It should be allowed to remain from seven to fourteen days. In burns of the second degree, one dressing suffices. In the worst burns, there is relatively little suppuration, and the eschars thrown off are aseptic. For burns of the face iodoform ointment (one part iodoform, vaseline twenty parts), is used, and covered with a gutta-percha tissue mask. The ointment should be renewed daily.—*Practice.*

The Dangers of Intestinal Puncture in the Treatment of Tympanites. By Dr. B. Farquhar Curtis.—Every little while there appears a new advocate for the use of puncture of the bowel as a means of relieving tympanites in peritonitis, intestinal obstruction and kindred conditions. There can be no question that the method has been employed very often with good results and without any signs of subsequent fæcal extravasation, but there can also be no doubt that there is very great danger of such an accident and of fatal consequences therefrom. There is probably less danger of fæcal extravasation if the intestine is not distended when wounded, as might occur in searching for pus in cases of abdominal abscess, than when it has been extremely distended for a long time, as in intestinal obstruction or peritonitis, for in the latter case the contraction of the wound in the gut must be very slow on account of the paralysis of the muscular coats caused by the over distension. In peritonitis, the effused lymph upon the outside of the bowel would stiffen its wall and prevent the contraction of the wound; but, on the other hand, it would remove all danger if there were adhesion of the intestine to the inner surface of the abdominal wall, and even if this were not the case at the point of puncture, the neighboring adhesions would limit any fæcal effusion which might occur. Thus the danger would be greatest in extreme and long-continued distension of the gut without peritonitis.

These facts are not presented with the idea that they afford sufficient ground for the absolute condemnation of this method of treatment, but as a warning that there exists a real danger of fæcal extravasation after its employment, and as an argument for the restriction of its use to those cases of extreme tympanites in which it is evident that the patient will succumb to the pressure of the gas in the intestines upon the diaphragm unless immediate relief is given.—*New York Medical Journal*, June 9, 1888.

Sudden Death from Fear.—It is well known, says the *Wiener medizin. Presse*, May 27, 1888, that profound mental impressions are capable of producing, not only transient and lasting disturbances of the central nervous system, but even now and then sudden death. In the *Münchener med. Wochenschrift*, No. 20, Bollinger reports a case of sudden death from fear in a prisoner. It seems that a farm-laborer, sixty years old, in a fit of anger struck another man on the head with a pitch-fork, inflicting two wounds involving the skull. The injured man died of pyæmia. His assailant was imprisoned, and became extremely de-

pressed and melancholy. On January 30, he did not seem to be quite well, but first complained of illness on the next day, when he had to appear before the jury as defendant. Here he became so miserable that he had to be carried away, and had the appearance of a man moribund. The skin was cold; there was no pulse, but repeated attacks of fainting. He was taken to the hospital, where he died in twenty-four hours. At the autopsy his organs corresponded with the relatively good state of health which he had enjoyed before the occurrence just described, and no such changes were found, especially in the brain and heart, as could be charged as contributory to the direct cause of death.—*Medical and Surgical Reporter*, July 28, 1888.

Rare Form of Mental Disease.—Mr. Conolly Norman read a paper on a rare form of mental affection, first described by Griesinger under the name of *Grübelsucht*. Since Griesinger's time, four or five cases had been recorded. The essential condition of the affection was the obsession of the mind by an impulsive concept taking the form of perpetual interrogation. The entire mental energy was occupied with constant questionings about indifferent matters. The patient described by Mr. Norman was tortured with a desire to read every scrap of written paper which she saw, and was unable to attend to her domestic duties through a constant impulse to investigate every detail of the most familiar things and most familiar operations. The illness began when she was about five months pregnant. She had borne children in very quick succession, and had been exhausted by lactation. There was also a moral factor in domestic troubles, and worry about money matters. The patient recovered under tonic treatment. Mr. Norman referred to the rarity of this affection, particularly among asylum patients; to the question of its causation: to its analogies to *folie du doute* and other forms of mental disease; and to the presence in the case which he described of nervous paroxysms, such as had been recorded only by Berger among previous observers.—*Proc. Roy. Acad. of Med. Ireland Med. Herald.*

Suicide with a Pin.–Thomson reports in the *Medical Press*, of February 22, 1888, the following extraordinary case:

The deceased was admitted to the Richmond Hospital, but was found to be dead. He had been arrested as a lunatic running about the streets in his shirt. On examination of the body, the head of a pin was discovered in the fifth intercostal space, two and a half inches from the nipple—downward and inward. The pin had traversed the pericardium, and wounded the anterior wall of the left ventricle. The pericardium contained seventeen and a half ounces of bloody fluid, and there was a small rent in the wall a quarter of an inch in diameter, which was filled by blood clot. The surface of the ventricle in contact with the pin was torn to the extent of nearly an inch; a small vein was also wounded; all the internal organs were congested; the urine was albuminous.—*Alienist and Neurologist.*

Vaccination in the Harem.—The following account is given in the *Indian Medical Gazette*, of the vaccination of 150 women in the Sultan's Seraglio at Constantinople. The operation took place in a large hall under the supervision of four gigantic eunuchs. The officiating surgeon, an Italian, was seated behind a large screen with a hole cut through sufficiently large to admit an arm. The women were concealed on the other side, and in this manner arms of various colors and sizes were presented to the operator. It was utterly impossible for the surgeon to get a glimpse of his patients, but in order to guard against the chance of his even looking through the screen two eunuchs stood by with a shawl, which was throw over the face of the surgeon each time the operation was completed, and did not remove it until the next arm was placed in position.—*Weekly Medical Review.*

Compensation for the Loss of an Eye.—In the Sheriff Court of Glasgow a boy has been awarded £65 as com-

pensation for the loss of an eye. He was in the employment of the Clydesdale Iron Works, and was set to fix a punch in a punching machine. In doing so part of the apparatus broke and a fragment struck his eye, destroying it. The sheriff decided that the boy was ignorant of the work and unqualified for it, and ought not to have been set to it. He therefore awarded damages and expenses.—*British Medical Journal.*

Sulphonal.—An account of this new hypnotic has already appeared in the *Journal.* Two articles on the subject appear in a recent number of the *Berliner Med. Wochenschr.,* June 18th, one by Dr. H. Rosin, of Breslau, the other by Dr. C. Oestreicher, of Berlin. Dr. Rosin tried sulphonal on eighty-two patients, besides others. In doses of two grammes (half a drachm) it was found almost invariably to have a decided hypnotic effect, without any disturbing symptoms, even when cardiac derangement was present. Such a dose Dr. Rosin considers equal to one-sixth or one-seventh of a grain of morphine, but the latter was found more efficient when the insomnia was due to cough or pain. A dose of four grammes (one drachm) produced a sleep lasting three or four hours in the daytime, and much longer at night; but the sleep after the dose always left a feeling of heaviness behind it. Dr. Rosin, who sticks to his text, concludes thus: "On the whole, sulphonal in doses of two grammes is as certain in its effects as morphine or chloral, and in cases of simple insomnia may be recommended in doses of double that strength, on account of its freedom from after-effects." Dr. Oestreicher observed the effects of sulphonal on fifty patients with nervous diseases, besides some who were phthisical, and concludes that in moderate doses—that is, two grammes—this drug is a non-injurious hypnotic. Respiration, pulse, and kidney-secretion were unaffected; the effects of persistent use are, of course, unknown at present. It is best given in capsules or tabloids, from its insolubility in water. Oestreicher finds it without smell or taste; Rosin states that it has a slight bitter taste. Sleep sets in more slowly than after chloral or morphine in corresponding doses, but lasts longer. The editor of the *Berliner Klin. Wochenschr.* confirms the above from observations of his own. —*Brit. Med. Journal.*

Medical Aphorisms.—A correspondent, signing himself "Artz," sends to the Canada Lancet the following professional aphorisms of Amédée Latour:

(1) Life is short, patients fastidious, and the brethren deceptive. (2) Practice is a field of which tact is the manure. (3) Patients are comparable to flannel—neither can be quitted without danger. (4) The physician who absents himself runs the same risk as the lover who leaves his mistress; he is pretty sure to find himself supplanted. (5) Would you rid yourself of a tiresome patient, present your bill. (6) The patient who pays for his attention is but exacting; he who does not is a despot. (7) The physician who depends on the gratitude of his patient for his fee is like the traveler who waited on the bank of a river until it finished flowing, so that he might cross to the other side. (8) Modesty, simplicity, truthfulness!—cleansing virtues, everywhere but at the bed-side; there simplicity is construed as *hesitation*, modesty as *want of confidence*, truth as *impoliteness.* (9) To keep within the limits of a dignified assurance without falling into the ridiculous vauntings of the boaster constitutes the supreme talent of the physician. (10) Remember always to appear to be doing something—above all, when you are doing nothing. (11) With equal, and even inferior, talent' the cleanly and genteelly-dressed physician has a great advantage over the untidy one.

Antisepsis by Means of the Perchloride of Mercury.—By Dr. Charles (*Jour. d'Accouchement de Liège*, Feb., 1888). The report of the Maternity Hospital of Liège for 1887 shows that 411 labors necessitated 45 operations with 2 deaths. The first was due to uræmia and the second to septicæmia,

contracted outside the hospital. Prior to May 14, 1884, carbolic acid was used, but since that date the sublimate solution had been exclusively employed. In 1882, 1883 and the first half of 1884, there were 751 admissions with 15 deaths, of which 11 were due to septicæmia (2 per cent. and 1.5 per cent. respectively). During the second half of 1884 and 1885–86–87 there were 7 deaths in 1,398 labors, only one of which was due to septicæmia, a mortality of 5 per cent. Taking the general mortality, irrespective of cause, the sublimate reduced it to one-quarter.—*London Medical Recorder*, April 1888.

H. C. Wood on Colds, Etc.—For general "*cold*," a free jaborandi sweat and quinine in full does. These may be assisted by mercurial or other purgatives. For *coryza*, bismuth and cocaine in jections. In *bronchitis* expectorants: chloroform is one of the most valuable to quiet cough, as whiskey, paregoric, glycerine, each ℥ij, chloroform, ♏xxx. Teaspoonful doses, shaking. Instead of the depressing expectorants, he uses: Potass. citrat., ℥j, succi limonis, ℥jss, syr. Ipecac., ʒ ss, tr. opii., camph., ʒ iij, syrupi qs. ad. ʒ iij. Desertspoonful or less every 2 hours. This failing he gives chloride of ammonium, seven and a half grain doses every 2 hrs. disguised by an equal quantity of ext. glycyrrhizæ, or in capsules followed by water.–*Therapeutic Gazette.*

Remarkable Fecundity.—A woman in France (*Brit. Med. Jl.*) gave birth to five children, three on June 4th and two more June 5th, four boys and one girl. They lived several days. The mother has been confined four times and had eleven children, the first time a daughter, the second time two daughters, the third three sons.

Mr. Henry T. Rutherford, M. R. C. S., Assistant Physician Chelsea Hospital for Women, reports very satisfactory results in hemorrhage due to ulterine fibroids from Hydrastis Canadensis. He uses the tincture in the dose of 15 minutes to one drachm, every four to eight hours. It does not cause painful contractions, indigestion and constipation as ergot does but is a stomachic tonic and can be used for a considerable time without ill effects.

A successful total extirpation of the Larynx is reported from Australia. It was in a German, aet. 62, for epithelioma. The symptoms were hoarseness, followed by cough, spasm, and inability to lie down. Ten days after operation he took jelly and was up the next day, and in less than three months was out unattended. The patient was exhibited before a society seven months after operation; he was then in excellent health and without any evidence of recurrence. The operation occupied 55 minutes and the highest temperature was $100\frac{4}{10}$ F.—*Brit. Med. Journal.*

Dr. C. Bell Taylor, F. R. C. S., Surgen to the Nottingham and Midland Eye Infirmary, has lately operated upon upwards of 700 cases of cataract without iridectomy and says that the result of his experience (which is now very considerable both with and without excision of the iris) leads him to the conclusion that iridectomy as a part of the operation of extraction, ought to be reserved for complicated or exceptional cases.

Sextuple.—Not very long ago an event occurred at Castagnola, in the Canton of Tessin, Switzerland, which is without parallel in authentic history. Madame Rezzonico, wife of the Syndic of the above place, gave birth to six children, four boys and two girls. The entire half-dozen were born living, but died in a very short time. The mother is thirty-eight years of age and has had several multiple births, the children being still living. The authenticity of the above occurrence is vouched for by a number of physicians from Milan, Como and other adjacent towns who visited the woman in order to obtain the most exact information concerning this unique obstetrical event.—*Gaillard's Jl.*

Medical Items.

Koller, the discoverer of cocaine is said to have removed from Vienna to New York.

The American Gynæcological Society will meet in Washington, September 17 to 19, instead of in Boston, as at first intended.

Professor Virchow has been awarded the Boerhaave Medal for Anthropology by the Haarlem Scientific Society.

Professor Leopold Max Politzer, the well-known specialist in children's diseases, died in Vienna on May 22, aged seventy-four years.

Doctors may differ, says a patient, but they don't disagree half as much as their medicines do.

Prof. Cornil, in the name of his pupils, MM. Chantemesse and Vidal, describes the microbe which causes epidemic desentery.

Dr. Lawson Tait, has succeeded in curing six out of eight cases of acute suppurative peritonitis, of various origin, by laparotomy and drainage.

Dr. Engelmann, writing from Berlin, says that the "furor operationi" has taken complete possession of gynæcology and absorbs everything in its dangerous whirl.

The cost of the last International Medical Congress in Washington was over $54,000, much exceeding that of any one of the previous three.

A new Medical College has been incorporated in Brooklyn, known as "The College of Physicians and Surgeons of St. Mary's Hospital of the City of Brooklyn."

Dr. Scribb says that a very good way to give iodine is by inhalation of iodide of ethyl. Iodine is found in the urine within fifteen minutes after the same number of inhalations.

Beginning with the session of 1888-'89, the College of Physicians and Surgeons, New York, following the example of Jefferson Medical College, Philadelphia, will require a three years' course of study from its students.

At the commencement exercises of Union College, New York, June, 1888, the honorary degree of LL.D. was conferred upon Mr. Lawson Tait, F.R.C.S., Professor of Gynecology in Queen's College, Birmingham, England.

It is said that a Berlin Society sent out a long series of bogus prescriptions, containing, for example, "tuber cinereum," "urticaria rubra," "pemphigus foliaceous."
These things were dispensed and paid for in over 60 Berlin drug stores.—*Brooklyn Medical Journal.*

Antipyrin has received a very black eye in France. The director of the Assistance Publique, of Paris, has announced that henceforth when antipyrin is prescribed the Pharmacie Centrale shall deliver dimethyloxyquinizine or analgesine instead. These articles are identical with antipyrin, but the names are not patented.

J. P. Campbell, Ph.D., a special student of biology at Johns Hopkins University for the past three years, has been appointed professor of biology in the Georgia State University and biologist of the experimental station. Dr. Campbell is a native of West Virginia who took his A.B., degree at the University, 1885, held a fellowship the following year, and last June took his Ph.D. degree.

The Lancet announces the deaths of the following eminent foreign medical men Dr. Rühle, Professor of special Pathology and Therapeutics and Director of the Medical Clinic in Bonn.—Dr. Mandelbaum, a practitioner of great repute in Odessa.—Dr. Pablo Emilio Molina Uribe, Professorof Clinical Medicine in the University of Bogota, Columbia, of fever contracted from the patients in the wards of the hospital.

The best method for curing fistula-in-ano according to Dr. Brinton, without the use of the knife, is by passing a silk or gum-elastic cord through the fistulous tract and bringing it out of the rectum and tying it. This will excite inflammation and the cord will gradually cut its way out followed by granulation. By this method the patient can be cured while following his ordinary occupation.—*College and Clinical Record.*

Dr. J. W. Milam, of Vincennes, Ind., writes to the *American Practitioner and News:* "In a large experience with antifebrin during the past four or five months, I have never discovered any evil results from its use. True, care has been taken to use it in reasonable doses, never more than ten grains. It is certainly a most reliable diaphoretic, and has never disappointed, having always reduced the temperature generally in thirty or forty minutes.—*Weekly Medical Review.*

Dr. W. L. Worcester, of Michigan, reports three post-mortems of pernicious anæmia. In all there was great atrophy of the mucous membrane of the stomach with almost complete absence ofglandular structure, thus confirmin the theoretical views of Flint. In another unquestionable case cure was effected by the prolonged use of arsenic, with hydrochloric acid and pepsin. The patient had a second attack four years later and died in three months.—*Gaillard's Medical Journal.*

Dr. Bell Taylor writes in the *British Medical Journal:* M. Pasteur's treatment has already been followed by 136 deaths; the vast majority of the people who have visited him were in no sort of danger, and it does seem a pity to induce such patients to incur the terrible risks inseparable from the hypodermic injection of rabid matter. Dr. Lutaud, chief editor of the *Jour. de Méd. de Paris,* says: M. Pasteur does not cure hydrophobia, he gives it, and perhaps he is right.

Selected Articles.

ANÆSTHETICS.

BY W. M. BEAUMONT, M.R.C.S.

Mr. President and Gentlemen:—I think I am stating a commonplace when I say that in many operations the most responsible and onerous duty falls on the anæsthetist. In minor surgery the question which weighs most on the mind of the patient, and the one which he inquires most anxiously about, is whether he is or is not a good subject for an anæsthetic. Will his sleep be temporary, or is anæsthesia merely another name for euthanasia? Small as his danger is, it is ever present; we can never say there is no risk; we are incapable of prognosticating; we can only rely on the doctrine of chances. What a fearful confession of our impotence is this—what a humiliating one! The patient, it may be in the flower of his strength, apparently sound in heart and lung, the very picture of robust and manly vigor, trusts implicitly in the skill of the surgeon. For some trifling operation he inhales the pain-killing vapour, and in a few minutes lies a corpse upon the table. The administration of anæsthetics is one, then, of supreme importance to us as medical men, whilst it is one of those duties which we are constantly called upon to perform.

Our responsibility to a patient is perhaps more personal and more obvious when he is anæsthetised than at any other time. The very rareness of a death intensifies this responsibility, and although to the professional expert the cause of death may be doubtful and inexplicable, yet to the British public no difficulties occur. The patient has been anæsthetised; he has died; *ergo* the surgeon, from want of skill, has killed him. It is as simple as the rule of three, and as evident as a syllogism. In my student days no systematic instruction in the administration of anæsthetics was attempted. It had to be picked up haphazard, and was included in no course of lectures or demonstrations. Whilst the senior hospital surgeon does not consider it beneath his dignity to perform some petty operation in minor surgery, the infinitely more responsible post of anæsthetist is entrusted to the senior student. But although the danger connected with the inhalation may be infinitesimal, yet our ignorance of any means of foreknowing who will take the anæsthetic well or who badly, should remind us that we ought to be always prepared for any emergency. A watchful eye on heart and lung is probably the most important characteristic of a good administrator. He should take absolutely no interest in the details of the operation, or he will miss the few storm signals that nature gives of coming dangers. How, then, can he minimise those dangers?

Let us consider what would render an anæsthetic perfect. First, it should be pleasant to take; secondly, it should produce perfect analgesia; thirdly, it should have no paralysing action on respiration or pulsation; fourthly, it should be followed by quick return to consciousness after the administration is withheld; and fifthly, it should be characterised by an absence of sickness, depression, and objectionable sequelæ. From the enumeration of these five points it is clear that we have no perfect anæsthetic. We have not one that fulfils all these requirements. Which anæsthetic shall be used in a given case depends on the fancy, the prejudice, or the opinion—call it which you will—of the administrator. And here I would say that the choice should be left to him, and not to the operating surgeon. Let the surgeon be responsible for the surgery, the anæsthetist for the anæsthesia. We have, as far as I know, no authoritative rule to guide us in the selection of an anæsthetic. It is remarkable that the Collective Investigation Committee of the British Medical Association has not taken up the subject, and collected statistics of their comparative safety, of the relative frequency of vomiting and struggling, and of other points with regard to sex, age, &c. Cards might be issued to the various hospitals of the country, and in twelve months a mass of valuable details might be collected, from which fixed laws could be deduced. It is impossible for individu-

als to do much. "Another death from chloroform," as the newspapers express it, occurs but once in many thousand inhalations. How, then, can one administrator judge of the comparative safety of any anæsthetic? Personally, I prefer ether for general use; but I do not believe in having one anæsthetic, and administering it in season and out, any more than I believe in one purgative, one expectorant, or one anything else. In midwifery I use chloroform, because it is convenient to administer, and because, for some unexplained reason, it appears to be almost absolutely safe in lying-in cases. Whether any other anæsthetic may not be as reliable I cannot say. I should not give ether in bronchitis or to children; neither should I give chloroform in endocarditis. Bichloride of methylene I have an unscientific prejudice against, and I seldom administer it from choice. It appears to be a favorite in ophthalmic surgery, possibly from the supposition that it seldom causes sickness. My experience of it, which is not great, does not bear out this supposition. I find that during the last two years and a half I have administered ether seventy-five times, chloroform twenty-two times, and bichloride of methylene thirty-one times; in all, 128 administrations, omitting other anæsthetics. Vomiting occurred thirteen times after ether, five times after chloroform, and eight times after methylene; or a percentage of 17·33 for ether, 22·72 for chloroform, and 25·80 for methylene. Of course, one ought to compare thousands of cases before dogmatising, but the figures, as far as they go, seem to show that methylene is oftener followed by sickness than either chloroform or ether. I invariably use Robbins's ether, which appears to me to be less often accompanied by struggling than that of other makers; and I administer it in a Clover's apparatus. The chloroform I prefer is Duncan and Flockhart's, and the methylene Robbins's. Struggling only occurred four times in the seventy-five administrations of ether—i. e., 5·33 per cent. Of other anæsthetics I can say but little from personal experience. The A.C.E. mixture I seldom employ, but I cannot help thinking that nitrous oxide is not sufficiently used in general surgery. Hospitals, as a rule, I believe, have no apparatus for its administration, and yet what a vast amount of real suffering, though of short duration, might be saved by its help. The opening of abscesses and removal of surgical dressings are instances in point. The local application of ether is too often as painful as the surgical procedure it is intended to relieve.

In conclusion, gentlemen, I cannot help thinking that the selection of an anæsthetic is too empirical. We wander aimlessly along without having any firm grounnd on which to walk. Were a collective investigation made throughout the hospitals of the country, we should then be able to get rid of the "personal equation" altogether and avoid the quicksands of mere opinion. And what a terrible word that word "opinion" is! A "professional opinion" may have satisfied a bygone generation of our brethren; it may console the general public of to-day; but it behoves us not to rest content until we can give a scientific reason.—*Lancet.*

THE ELECTRICAL TREATMENT OF DISEASES OF THE UTERUS.

BY SIR T. SPENCER WELLS, BART., F.R.C.S.

I have had, perhaps, a longer and more varied experience than most men in dealing with uterine diseases, especially those which are characterized by overgrowth. I have so constantly had to regret the inefficacy of medical treatment; and the results of surgical operations, though sometimes brilliant, have often come so short of my desires, that I have for many years past fallen into a frame of mind readily disposed to listen to any suggestion of a mode of treatment which offered a reasonable chance of success, and avoided the risks and perils attending the bolder practice. So, when reports reached me from Paris of what Dr. Apostoli was teaching and doing, they came with a welcome ring.

Electro-therapeutics were no novelty to me. More than thirty years ago I had put galvanism to the test, and had gathered in various ways evidence of its potency both in destroying and repairing tissues. What I had learned of the treatment of ulcers by galvanism was published in 1849 by Golding-Bird, and may still be read in an appendix to his book; but his son and Mr. Nunn are the only surgeons, so far as I know, who have made much use of the practice.

Not long afterwards I tried the galvanic stem pessaries of Simpson in amenorrhea, and have used them until now with occasional good result. I knew also what Radford had done with galvanism in the treatment of uterine hemorrhage, and what Simpson had taught as to the influence of galvanism on uterine contraction in labor. I have repeatedly made use of the galvanic cautery in various ways, and have very often removed masses of epithelioma, or the cervix uteri itself, by a platinum wire heated by a battery and used as an écraseur, with very satisfactory results. Quite recently, with Dr. Goddard, of Highburg, I removed a cervix uteri without the loss of one drop of blood. My attention was later on attracted to the electrical work of the French and American surgeons in reference to fibroid tumors of the uterus. This was so little satisfactory that it dropped out of notice. Our English experiments were not more encouraging, and surgical enterprise seemed destined to throw into the shade all less dazzling endeavors.

In the meantime, taking up the idea of the wonderful influence of galvanism upon the nutrition of tissues, Apostoli was unobtrusively resolving the problem of its right application in the treatment of abnormal growths and exudations. His published observations were so interesting, and the reports of eye-witnesses were so confirmatory, that in the autumn of 1886 I determined to see and judge for myself. I went to Paris, and was received frankly and cordially. Dr. Apostoli explained to me his views, and demonstrated his mode of procedure. He threw open the records of his daily practice, and gave me the opportunity of verifying his diagnosis, and witnessing his treatment of the cases actually under his care. Besides this, he mustered for my inspection about sixty of the patients who have passed through his hands. I heard many of their histories in their own words, and could contrast for myself their actual condition of good health and activity with the symptoms reported in the early notes of their attendance, and the deformity represented in the plaster casts of their bodies, taken before the tumors had been influenced by the galvanic current. I spent many laborious hours in what I may say was a rigidly skeptical examination of the evidences before me, seeking for weak points in the system and the resolution of theoretical objections.

The conviction was irresistible that, though the method might not have reached its point of perfection, the work, so far as it went, was good. If the women were not radically dispossessed of their tumors, they were symptomatically cured. Nothing but prejudice could have turned the back upon the facts; and it would have been unjust not to put the matter to further proof. This I have unhesitatingly done. If I have hitherto been silent, it was because I did not wish to prejudge the case. But I have not been inactive, for I wished that if the utility of the method could be made as manifest here as elsewhere, it should be advocated impartially, and presented to the profession upon reasonable grounds.

The uterine diseases which come under Dr. Apostoli's care range through all degrees of fibroid development. He has to deal, as we all do, with simple cases of sub-involution, general hypertrophy of the organ, with metritic deposits all round, polypoid excrescences in the cavity, thickening, more or less irregular, of the walls, and sub peritoneal out-growths expanding into abdominal tumors. Practically all these cases group themselves into two classes; first, those which give no trouble and may be left alone; and secondly, those which threaten health and life by loss of blood, or, mechanically interfering with the organic functions, cause a multiform series of distressing symptoms.

In the treatment of these conditions, instead of scraping and canterizing the cavity with a curette, or caustics, or fire, Apostoli does the same thing with a pole of the galvanic battery. We give ergot, or mercury, or iodine, or bromine, in the hope of altering the nutrition of the diseased mass, he sends a disintegrating current through it. We castrate to cut short a woman's sexual existence, he seeks to quiet neurotic sensibility, and induce regularity of ovarian function. Where we proceed to a root and branch extermination, he proposes a denutritive paralysis of the uterine substance. Time will show whether, and how far, he surpasses us in his results.

But the novelty at present is not so much in the fact of electricity being used, as in the mode of using it. Others have tried the same means, but not in the same way; former methods were uncertain dangerous, and insufficient. The point that Dr. Apostoli has arrived at is this; he has studied the effect that certain currents will produce, he measures the intensity of the currents, and he has found the means of safely directing them, with proper force through the diseased tissues, to ensure the partial if not complete disorganization of these tissues with the desired coincident relief of suffering, and often with restoration of general health.

It is the continuous galvanic current which is generally brought into action. For this purpose the operator must be provided with an apparatus which will guarantee him an unfailing current of at least 250 milliampères, or electrotherapeutic units. I may say, in passing, that it may probably be found convenient to speak of milliampères as "units" of current stength—10, 20, or 60 milliampères, for example—would be 10, 20, or 60 units. In practice at the hospital or the surgeon's residence, a battery of Leclanche cells answers admirably. It is enduring and easily manageable. For work at the patient's home a portable battery of the bisulphate of mercury is convenient, but it requires great care and frequent renewal. An indispensable accessory is the galvanometer. With a fractional deviation it gives a measure of the intensity of the current passing. The graduation should rise to 250 unites or milliampères, though this intensity is rarely wanted Before every operation the perfect working order of battery, galvanometer, and conducting wires should be ascertained. As it is a characteristic point in the Apostoli practice that the galvanic current should be carried either into the cavity of the uterus or into the substance of the tumor, appropriate sounds and trocars, are essential. To avoid loss of power by action on the metal, the sounds are made of platinum. For punctures with a negative current steel trocars are equally good, but when it is intended to transmit a positive current, a certain length of the sharp end of the trocar must be made of gold. All the portion of the sounds and trocars passing through the vagina from the handle of the instrument to the mouth of the uterus or point of puncture must be insulated. Before every examination or operation the closest attention should be given to antiseptic percautions, both as regards the patient, the operator, and the instruments. During the whole course of the treatment vaginal irrigations, with sublimate or phenol, are never to be neglected.

The labors of Apostoli have expanded and given a definiteness to our knowledge of the special power of galvanic currents in the treatment of uterine diseases, and of the mode of applying the currents in a way which I may thus resume.

In the first place, we have learnt from him better to understand the double action of the uninterrupted, continuous, galvanic current. The one action is purely local, and coincident with the flow, the tissues immediately in contact with the pole which delivers it are decomposed, the bases and acids of the substances and fluids acted upon are set free, and, according to their nature, produce canterization of the surrounding parts, independent of any thermic influence. This effect is local, immediate, and visible. The second action is due to the interpolar passage of the current. It is a trophic action influencing the

nerves, vessels, and lymphatics, followed by molecular changes, so as to modify the nutrition of the tissues through which the current goes, and varying according to the pole employed. The effect of the direct, and of the secondary counter-current is durable, and, whatever may be our interpretation of it, it is remedially of far more importance than the mere galvano chemical canterization.

Secondly, though the coagulating power of the current passing from the positive pole was known from the writings of Ciniselli and A. Tripier, we have had disclosed much more since as to the distinctive character of the action of the currents from the two opposite poles. It was with the positive current that Apostoli began his attack upon uterine fibroids, because of the more striking nature of the hemorrhagic symptoms, and it was the speedy relief of this grave trouble by the production of a hard, dry eschar, and resisting cicatrix, which encouraged him to persevere. The eschar resulting from the alkaline caustic action at the negative pole is just the contrary, softening and liquefying, and tending to promote discharge and hemorrhage. Logically enough, its dissolvent powers were applied to the opposite class of cases, where there was no hemorrhage, and the object was rather to reduce the bulk and solidity of compact masses of fibroid material. Experience has proved this to be as good in practice as in principle. The positive pole is therefore designated as "anti-hemorrhagic" or "hemostatic," while the words "hemorrhagic" or "denutritive" are applied to the negative pole.

Thirdly, Apostoli has taught us a much more satisfactory way of utilizing these currents, in uterine diseases. His predecessors had used currents which were generally uncalculated and ineffective. They were often not strong enough to do much good, yet at other times sufficient to bring about mischievous results. They were brought into play in an ill-judged fashion, and, when used by means of puncture, the punctures were made through parts which ought to have been left untouched. Now the operation is performed under such control as to be a matter of measurable certainty. A strong and regular current is at command. By means of the galvanometer a knowledge of the exact intensity of the current employed is insured. The dosage can be regulated in proportion to the cauterizing and trophic effects considered necessary. A current of high intensity can be made to traverse the tissues inoffensively and brought out through the abdominal integuments in a dispersed fashion, without more than a temporary blush, and made to complete the circuit through the cutaneous electrode imbedded in wet clay. Than this clay, nothing as yet has been found more effectual. Then, by insisting upon the intra-uterine introduction of the current by means of the uterine sound, or its direct interstitial application through the inattackable trocar, a certainty of action is obtained which was otherwise out of reach. The whole performance is thus strictly at the will and under the control of the operator, who, granted his mastership, wants no other guide either as to the dosage, direction, or duration of the current than the facial expression of the patient, or her declaration of tolerance.

Fourthly, other important points upon which we have clear and definite information are the modifications which this treatment requires according to the varying nature of the cases, and the successively changing circumstances of each case as the treatment is going on and the wide range of uterine affections to which it is adaptable. Given a tumor and a current, there is no such thing as reciprocal automatic action. At every step of the process of cure, deliberation, judgment, and promptitude of resource are challenged. One day there is an unaccountable power of endurance, another an exaggerated sensibility, one day a perplexing structural resistance, another an easy flow of current, all which have to be taken cognizance of and throw an ever-recurring strain upon the mindfulness of the surgeon, enough to baffle book guided novices, and make inestimably valuable the more than five

years' experience to which we can recur for counsel. A field, too, is opened up for exploration among the infinitely multiform presentations of disease of the female generative organs, untraversable by the limited powers of any one man, but to which Apostoli has pointed the way. This will be the work of the coming generation.

Lastly, there are several interesting questions upon which the work of Apostoli has thrown a new ray of light, such as the dangers and difficulties of the procedures; their being a cause, or the reverse, of subsequent sterility; the practicability of applying the treatment in cases where the uterus is impenetrable; the permanence of the benefits derived from the treatment in the mitigation of symptoms and the reduction of the tumors; the relation of the menopause to the production or dispersion of fibroid enlargements. It would take up too much of your time if I were to consider these in detail, and it is needless, as Apostoli himself is here, on the invitation of your president, to give any required information.

But, admit that there may be danger in treating our patients by electricity. Is this a reason for rejecting it? What surgical operation is free from risk? Would common sense sanction our leaving disease alone till science has reached completion and skill infallibility? The danger lies not in the method but with the operator, and the moral is, that no man should undertake this work till he has qualified himself to do it well.

Then, as to the permanence of cure, where cure there has been, one can only say that though five years and a half is but a short term to form estimates upon, when we are assured that during that time the return of symptoms, or the necessity for further measures has been quite exceptional, it augurs well for the future, and the objection of the possibility of relapse becomes of little weight.

Again, when Apostoli tells us that some of his patients now under treatment are women in whom the tumor developed after menopause, no trace of such a growth having previously existed, what are we to say to the principle of Hegar's operation? To say the least, it would limit castration in the treatment of uterine disease to the cases where loss of blood is the prominent symptom in younger women. I might go on much further, but I think I have said enough to show that whatever may be, or may not be, the merits of Apostoli's method, we have made since he began his work a distinct scientific advance. And coupling the specific information we have thus acquired with our previous diagnostic tact and pathological exactitude, it appears to me that we are in a better position, even supposing that circumstances hinder the personal practice of the method, not only to discuss the abstract principles upon which it is based, but as consultants to pronounce upon its respective applicability to the cases submitted for our opinion.

There are conditions of fibroid tumors in which it would seem to me almost idle to suggest electricity. A polypoid growth from the mucous surface of the uterus projecting into the cavity, or perhaps through the os, can be so easily and expeditiously taken away that I should not think of any slow or gradual process. Neither does it appear very probable that a subperitoneal outgrowth from the body or fundus of the uterus could be in any great degree affected by any current that could be made to reach it. Myomotomy would be work of minutes and the risk scarcely worth mentioning. Even large solid tumors, the removal of which means the removal of a great part of the uterus, have been successfully removed by me and by others, and success has increased with experience. But the risk must be always great, and there are tumors so large, or with such intimate connections, that no prudent surgeon would meddle with them. Here, surely, is the occasion for the electrician to show his power. His method is a new resource for a desperate condition, and should be welcomed as such. It has been successful in such cases if not completely so, yet to a degree which has rendered life enjoyable. No weak prejudice should stand in the way of recommending a trial under experienced guidance.

Where the object is mainly to suppress hemorrhages, electrical treatment has decided advantages over other practices. Should the tumor be growing, but not advanced beyond the limits of reasonable surgical interference, balancing the comparative risk, I should be disposed to put the matter to the test; since in case of failure, the more hazardous operation of removal can still be done. In my opinion, with the option before her, it would be neither wise nor charitable to give a patient strong advice in favor of an immediate cutting operation.

Experience seems to show that there is a group of cases, numerous as they are troublesome, of chronic metritis with enlargement and surrounding deposits, which may be cited as pre-eminently eligible for electric treatment. They are, as regards the patient, painful and exhausting. To the judicious surgeon they are exasperating by their rebelliousness, and in some rash hands they have opened the way to practice more lamentable than the disease. It will be one of the crowning merits of electro-therapeutics if proved to be equal to bring relief to these patients. Recent reports give good reason to hope that this end may be realized by a careful use of the positive galvano puncture.

We have not, I am inclined to think, taken heed enough of the work of Tripier and Apostoli in reference to various disordered states of the uterine appendages. The soothing effect of the vaginal or uterine bipolar application of the induced current in some distressing forms of ovarian neuralgia and vaginismus is said to be marvellous and enduring.

As a last word, I may say that we are face to face with an important revival; and though some American surgeons have gone before us in its acceptance, nowhere more than in our own country has there been shown an open-minded readiness to weigh fairly all the evidence which Dr. Apostoli has set forth in support of his system.

In London we have heard, through the medical journals, of some failures, of one death, and of more that one accident, probably due to the inexperience of the practitioners. But we have far more encouraging reports from Edinburgh; and if some member of this Society who combines sufficient knowledge of electrical science with practical experience of the diagnosis of uterine diseases, and of the treatment by other methods, will carefully put to practical test the conclusions already arrived at by Dr. Apostoli, I am very hopeful that the result will not be disappointing.—*British Medical Journal*, May 12.

Clinical Notes.

CASES OF FOREIGN BODIES IN THE EAR, NOSE, &c.

BY THOS. C. PEEBLES, M. D.,
LUTHERVILLE, MD.

Case No. 1.—A boy about three years old, put a small white bean into his right ear. I saw him a few hours afterwards and on examining the ear I could see the smooth end of the bean at the bottom of the cavity. The patient was an extremely restless, nervous little fellow and I found it next to impossible to keep him quiet for one moment. I could not get the mother's consent to let me give chloroform. Having recently read Dr. J. J. Chisolm's article on removal of foreign bodies from the ear, in which he recommends filling the cavity of the ear with alcohol to produce shrinkage of a leguminous foreign body and then using a syringe and warm water. I followed this plan, but my first attemps were unsuccessful, and after trying it several times daily for two days, I told the boy's mother I would try once more on the morning of the third day and if I did not then succeed, she would have to take her son to a specialist in the city. After using the syringe again I found that the bean had changed its position a little and I was able to pass Gross's little hook behind it and draw it out. The bean was one that had split lengthwise before its introduction and had shrivelled slightly from the continued soaking in alcohol; the lower end was imbedded in wax, which I suppose the water could not reach at first.

Case No. 2.—A boy five years old, while playing with some beans, slipped one into his ear. His parents, and I suppose most of the old women of the neighborhood, tried everything they could think of to drop into the ear, besides poking the ear with hair-pins, knitting-needles, &c. After several days the case was brought to me. The ear-speculum revealed a small white bean lying across the bottom of the cavity. I thought it looked macerated and the idea struck me that I might pinch up a fold of the skin of the bean with a pair of fine forceps, which, after a little scraping with the points of the forceps, I succeeded in doing and fortunately the skin was tough enough to enable me to pull it out without breaking.

Case No. 3.—A girl eighteen months old, put a grain of corn in her right nostril. The parents had been trying to get it out for some time and the nose was very much irritated. I passed a gum elastic catheter, pushing, as I thought, the grain of corn back into the throat. The mother did not seem satisfied. She said "she could still see the corn in the nose," but what she pointed out to me was the side of the vomer, and as the child breathed freely through both nostrils, I left, telling her to send again for me if there was any further trouble. In the night the child sneezed up a small fragment of the grain, and the rest passed from the bowels next day.

Case No. 4.—A girl about four years old had a severe fit of choking; her grandmother pushed her finger down the child's throat, but did not feel any thing there. When I arrived I wrapped the child up in a sheet and put her across her grandmother's lap and got her head down in front of the window in a good light. I found a large pin, its point sticking into the back of the tongue and its head pressed against the back of the pharynx. I took hold of it with a pair of forceps, but found I could not draw it out until I freed the head by pushing the point deeper into the tongue.

Case No. 5.—Mrs. R—— While, at supper eating beef-steak, accidently swallowed a large piece which lodged about the top of the œsophagus, causing great distress. I was called in haste and arrived without my instruments, not knowing the nature of the case. There was nothing to be seen in the throat and the finger could not reach the seat of trouble. I gave an emetic and in a few minutes she vomited the piece of meat and was relieved. I remember, years ago, while talking to Dr. R. W. Smith (then Prof. of Surgery T. C. D., and brother-in-law to Sir W. Stokes) I noticed him adjusting something in his hat. He asked me did I know what that was for? He explained to me that it was a light whale bone probang and that whenever he went to a dinner party he always carred one with him, and that he had saved two lives by doing so.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING APRIL 11, 1888.

The President, J. Solis-Cohen, M.D., in the chair.

Dr. J. M. Barton read

A REPORT, AND EXHIBITED THE SPECIMENS, OF SOME CASES OF ABDOMINAL SURGERY.

Gentlemen:—By invitation of your Board of Directors I submit some specimens, this evening, from cases of abdominal surgery and present the following notes for your consideration:

Abscess of liver. Free incision and drainage; recovery.—George B., aged thirty-eight years, was admitted to the medical wards of the Jefferson Medical College Hospital, July 29th, under the care of my colleague, Dr. Neff. The patient was suffering with an immense abscess of the liver, extending the area of the percussion dulness to below the umbilicus and to the left of it. At the request of Dr. Neff, I removed by aspiration more than a quart of "brick-dust" colored pus, with such relief that the patient was able to return to his

home in the interior of the State. The abscess cavity rapidly refilled, and he returned to the hospital, when we decided to operate by the method of Dr. Ransohoff, of Cincinnati. Making an incision through the abdominal wall, five inches in length, at the outer edge of the right rectus muscle, permitting it to gap, fastening the edges of the wound by sutures to the liver, and when firm adhesions had taken place, opening the liver by the galvanic knife. When adhesions were found to have formed, and I attempted to divide the tissues of the liver with the galvanic knife it did not act well; at first, while white-hot, it would cut readily, but the resulting very free bleeding quickly short-circuited the current and the knife became instantly cold. After repeated trials it still proved so unsatisfactory that an ordinary scalpel was substituted, with which the pus cavity was reached. An attempt to check the bleeding from the margins of the incision, by the cautery knife, was also unsuccessful, and it was only by filling the wound with a number of rubber catheters, which happened to be at hand, that the hemorrhage was controlled.

The abscess cavity was washed out daily with various antiseptics; it gradually closed, and the patient was discharged cured. When Dr. Neff saw him the following December, his weight was one hundred and fifty-six pounds, his pulse beat eighty to the minute, and he had no evidence of hepatic disease.

Epithelioma of the œsophagus; gastrostomy; death.—John T., aged forty-two years, a patient of Dr. Joseph Lopez, of Philadelphia, was admitted to the Jefferson Medical College Hospital, December 5, 1884. He had suffered with difficulty in swallowing for one year, which had gradually increased until, at the time of admission, he had taken no nourishment whatever into his stomach for a week and but little for the last two months. He was greatly emaciated. He could drink as much as three ounces of fluid, which would be immediately ejected with great force. A bougie could be passed readily to within four inches of the cardiac orifice of the stomach, when it was suddenly arrested.

I performed gastrostomy December 9th, assisted by Drs. S. W. Gross, Brinton, Pancoast, Hearn, and others. An incision two and a half inches long was made parallel to the margin of the ribs on the left side, and about one finger-breadth from them, beginning at the outer edge of the rectus muscle. As soon as the peritoneum was opened, the stomach appeared and its identity was verified by those present; six sutures were used to bring the viscus in contact with the abdominal opening, two at each side and one at each end. Each suture was made by placing two needles upon a fine silk thread, one of them was carried between the muscular and mucous coats of the stomach for about one-third of an inch and brought out, both needles were then carried though the abdominal walls about one-third ot an inch apart. Traction upon these sutures brought the walls of the stomach in close contact with the parietal peritoneum. None was tied until all the sutures were in place. A silver wire suture was introduced through the outer coats of the stomach about the centre of the portion exposed, to serve as a guide when the stomach should be opened some days later.

The patient suffered no pain or other inconvenience from the operation, and had no evidences of peritoneal inflammation, but notwithstanding that the nourishment by rectum was continued and well retained, he lost ground so rapidly and his exhaustion was so great that we opened the stomach on the second day instead of waiting for the fourth or fifth day as is customary. Immediately on opening the stomach a rubber drainage tube was introduced and by a funnel inserted into the tube several ounces of warm milk were at once given, and though this was repeated every few hours he continued to sink and died two days later, or four after the operation.

Strangulated hernia. Operation; loss of nine inches of intestine; subsequent laparotomy; several feet of bowel found obstructed by inflammatory deposits; bowel above the obstruction joined to bowel below the obstruction; recovery.—

Frank F., aged eighteen years, was admitted to the German Hospital on the evening of March 3, 1884, with a strangulated right inguinal hernia of eighteen hours' duration. On opening the sac of the hernia nine inches of the bowel were found to be in a sloughing condition. The ring was nicked, the healthy ends of the bowel made to protrude, and the gangrenous portion incised. We proposed, on the next day, to freshen the edges of the healthy bowel and bring them together. By the following morning the patient had developed an intense peritonitis with a temperature of 104°, and the operation was postponed. After a week of severe illness he recovered, the sloughing bowel having separated in the meantime.

Some weeks later, as he was slowly emaciating, and the discharges looked as though the artificial anus was high up the bowel, operative interference was decided upon. The wound was enlarged, directly upward, at first but slightly, but ultimately to the extent of several inches, for the purpose of joining the divided ends of the bowel.

In the neighborhood of the artificial anus from two to three feet of intestine were found, strongly matted together by inflammatory deposits; small projecting loops of a few inches in length were found free with both ends terminating in the mass. The lower end of the bowel from which the slough had separated, could not readily be distingnished from any of the other loops; and it soon appeared that it would be useless to join it to the bowel which formed the artificial anus, as it was completely obstructed at many points. As the colon was free, and a few inches of the ileum, at the suggestion of Dr. Weed, then one of the resident physicians, it was decided to join the bowel forming the artificial anus to the colon. For this purpose a small opening was made in the cæcum, and one blade of Dupuytren's enterotome introduced, the other being carried into the bowel forming the artificial anus, and the two blades clamped together. A temporary ligature was placed around both intestines while the toilette of the peritoneum was made; they were then fastened in position, and the wound, about six inches in length, closed.

The patient did well after the operation, though it was found necessary to reapply the enterotome twice before a satisfactory opening was obtained, three times in all. The fecal fistula rapidly contracted, and when I last saw him he was able to wear a pad over it for a week without removal; his bowels acted naturally, he was free from pain, gaining flesh, and working as elevator boy at the hospital.

I heard afterward that another surgeon had attempted, though unsuccessfully, to close the fistula.

Ruptured ovarian cyst. Ovariotomy; death on the fourth day.—Mrs. D., aged fifty-four years, a patient of Dr. Hogue, of Houtzdale, Clearfield Co., Pa., had suffered for some years with a large ovarian tumor, and though she had been advised by many physicians to have an operation performed, she refused until symptoms of suffocation appeared, when I was hurriedly summoned to operate.

The abdomen was enormously distended, but did not present the typical diagnostic points of an ovarian tumor.

Dr. Hogue, of Houtzdale, his brother, Dr. Hogue, of Utahville, and two of their office students, were present and assisted at the operation. On incising the peritoneum, at once the contents of the ruptured cyst appeared in the wound. This material would not flow through a canula, and it was not until the incision had been increased to six inches that I was able to draw the glucose-like mass out; even then it would not run, but had to be lifted and drawn out by the hand. Of this substance there were in all about sixty pints. The abdomen was cleaned with great difficulty, the material was adherent to everything and had penetrated to all partions of the cavity. Both visceral and parietal peritoneum were thickened, roughened, and nodular. The cyst was ruptured in many places, and had probably been ruptured for a long time. It had but few adhesions and these to the omentum, its pedicle was long, and had the operation been performed before rupture it would have

been quite a favorable case. The pedicle was tied with silk, dropped, and the abdomen closed. The patient scarcely suffered from shock, though the operation was quite prolonged. After the operation she did well for two days, some of the cyst contents passing through the drain, but she perished on the fourth day, probably with septic peritonitis.

Encysted pelvic abscess. Abdominal and visceral peritoneum stitched together, abscess emptied and drained; recovery.—Morris S. aged thirty-one years, was admitted to the Jefferson Medical College Hospital June 17, 1886. He had a tumor about the size of the adult fist, deep in the right iliac fossa, just to the right of the median line. It was regular in its outline, not very painful, though tender on deep pressure, and it was covered by the intestines.

He stated that he had noticed it for two years, and that it was nearly its present size when first discovered. He had lost flesh, but was still in quite fair health. No pulsation and no murmur could be detected. His temperature, though normal in the morning, ran up to 102° each evening. It was now considered as probably an encysted purulent collection, although there were no evidence of any disease of the spine or kidneys.

With the assistance of my colleague, Dr. O. H. Allis, and the house staff, I made an incision four inches in length, beginning one inch above and one inch to the left of the anterior superior spinous process, then carried it downward and inward parallel to Poupart's ligament; about the same incision as is used for the ligation of the iliac arteries. After the muscles were divided, the transversalis fascia was separated until we were close to the growth, when fluctuation was readily detected. Carrying our incision toward the mass it was found that the parietal layer of peritoneum and that covering the abscess, though in contact, were not adherent. A series of catgut sutures and some silk ones were introduced, fastening the two layers of peritoneum together and surrounding the proposed point of incision. After verifying our diagnosis by the exploring needle, a free incision was made giving exit to about eight ounces of healthy, odorless pus. A finger introduced into the abscess cavity failed to discover the cause of the collection. A large drainage tube was introduced, by means of which the cavity was daily irrigated with antiseptic solutions, the discharge gradually ceased, and he was sent out cured July 26, 1886.

(*To be continued.*)

THE INFLUENCE OF WATER ON OBESITY.—Dr. Lorenzen of Erlangen, has been discussing the influence of liquids on obesity. The first experiment was made on himself. For a period of nine years he drank a large quantity of Erlangen beer daily. During four years of the period the daily quantity consumed amounted to 10 litres, or 2 gallons 1½ pints, or about 22 lbs. weight; during the remainder of the period the quantity ranged from 5 to 7 litres in addition to 1 litre of wine. In this way he succeeded in increasing his body weight by 78 lbs., and the usual unpleasantnesses of obesity made their appearance. On shutting off the liquids his weight fell 14 lb. in 7 days. If however, more water was taken, but without alcohol, the weight increased again. Within five weeks he reduced himself to the extent of 23 lbs., the chest measurement diminished by 7 ctm., and that of the abdomen by 13 ctm., and the difficulties attending respiration disappeared. Similar experiments carried out on colleagues, who were likewise heavy weights, had similar results. The disappearance of fat on withholding fluids he endeavours to explain on the hypothesis that the cells whose province it is to decompose albumen when a large quanity of fluid is taken, now expend part of their energy in the combustion of fat. The fat they consume is replaced by fat from the tissues.—*Med. Press.*

SEA-WATER IN LONDON.—The London Sea-water Supply Bill has passed both houses of Parliament. The sea-water will be brought to London from Sussex County. It is thought that the works will be completed by 1890. As London grows the supply of fresh water becomes scarcer, and it is hoped that the sea-water will be used for bathing and street watering.

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BALTIMORE, AUGUST 18TH, 1888.

Editorial.

MODERN TREATMENT OF THE INSANE.—One of the most striking advances in the Art of Medicine in modern times is that connected with the treatment of the insane. Formerly insane asylums were mere prison-houses, with all the accompaniments of dungeon and chains. It is harrowing to one's feeling to read the shocking accounts of the want of comforts, the filth, and the inhumanity, that were the prevailing characteristics of those institutions. The insane themselves were looked upon as the objects of a moral obliquity, in which all their evil instincts were let loose to dominate their existence while the higher attributes of nature were, often by their own evil tempers, completely suppressed. In consequence of this belief, the insane were regarded in the light of criminals or would-be criminals, liable, at any moment, to commit violence, and hence from motives of safety to the community requiring restraint.

The great characteristic of this age, as a writer has well said, is its humanity, and this extends not only to every phase of human suffering and misfortune but also to every variety of living creature. The improvement and alleviation of the condition of the insane has been one of the blessings resulting from the growth of this sentiment. Co-operating with this in recent years has been the change of view with reference to the nature of insanity. Formerly regarded as *moral* disorder, it has come now to be looked upon as a *physical disease.* The treatment of it has therefore been completely revolutionized and the asylum has been accordingly converted from a prison into a hospital. Mechanical restraint has been done away with or relaxed, and liberty has been very largely restored to the sufferer. Not only the management of the hospitals has been changed but their architecture, and the cotttage plan and segregation has taken the place of the rectilinear building and congregate treatment. As evidences of these changes may be cited the facts (*Dr. Walter Channing, Boston Med. and Surg. Jl.*) that the State of New York "is about to erect a new institution with 22 different buildings, many of them on the cottage plan, with congregate dining-rooms, diversified architecture and every arrangement to carry the patient from a perfect hospital to a nearly ordinary dwelling-house;" that the State Lunatic Asylum at Utica, "has, during the last year, abolished restraint and given away the last cribbed;" and that many small private institutions have been established to meet a growing demand for greater freedom, privacy and comfort, and more of the surroundings of a home. Much of this change has been accomplished within less than a dozen years, and it is still progressing. Apart from medical considerations, it will be a source of gratification to all who have any humanity, everywhere, that the condition of a class of sufferers, which appeals to our sympathies more strongly than any others, is being so much bettered and as no one knows how soon he may become the subject of a similar calamity, it is to the interest of all to give the weight of their influence and encouragement to this beneficent movement.

TIT FOR TAT.—"Under the fostering care of the ethical rules of the Am. Med. Ass'n. there is growing up in the West a

practice of physicians advertising themselves as specialists in the medical journals."—*Med. Record.*

"Under the fostering care of no ethics of any kind, a surgeon of New York, who was connected with the case of the late Gen. Grant, and who has considerable connection with the *Med. Record,* manages to have himself interviewed rather frequently by newspaper reporters, the interviews being telegraphed through the country as "specials," or sent out by the news agencies." "This surgeon was interviewed on Scheurlin's bacillus of cancer, the interview being sent to the Chicago *Times* * * with the information that the surgeon was a high authority on cancer." "Interviews with this surgeon on the case of the late Emperor Frederick III have been published." "A Cincinnati paper contained a telegraphed item, the result of an interview, stating that this surgeon had been called by cable to attend the Emperor." "If one must advertise is it not better to advertise in medical journals than in the daily newspapers? While unprofessional advertising in medical journals is to be deplored and discountenanced, it must be remembered that only a few are so fortunate as to count reporters and interviewers among their friends; a species of good fortune that may be due in some cases to the fact that the much interviewed medical man has at some time forcibly injected himself and his services into the case of a sick man with a national reputation." "We do not remember that we have ever seen anything that would go to show that the consultants in the case of President Garfield attempted to make capital out of their connection with that celebrated case." "It is still unsafe for a person living in a glass house to throw stones." *Jl. Am. Med. Asso.*

The Benighted Orient.—An article translated from a Medical Journal published in Egypt, "*Al Shifa,*" and published in the *Albany Medical Annals,* shows why Arab-speaking nations are so deeply sunk in ignorance and how difficult it will be for them to become enlightened. In the course of some remarks upon the reserches of a French physician, bearing upon the treatment of the hæmaturia caused by the *Bilharzia Hæmatobia,* the editor had taken occasion to contrast the enterprise and activity of this non-Arab speaking occidental with the supineness and apathy of his own people. His indignation is aroused in discussing the subject, and he says not the humble and ignorant alone are amenable to blame but princes also, and men of science. He confesses with shame that the dust of the tombs covers what little literature there is; that the book of knowledge is opened not, or if opened, not read, and if read, suggests no idea, elicits no observation, rouses no one. What increases still more his despair is that his countrymen are content to rest on the laurels of their ancestors while denying to foreigners any glory because of the obscurity of their ancestors. He declares that they do not understand the motive and value of utility, that they do not comprehend or recognize merit, that their actions are prompted too much by jealousy, hatred and revenge.

While a severe arraignment of his countrymen, his expressions are altogether general, they do not exceed the limits of propriety, but seem to us to be only the just indignation of a true patriot whose motive is an ardent love of country and profound aspirations for its betterment. Not so with the authorities. He receives promptly a sharp notice from the Minister of the Interior, telling him that he had criticised and attaked certain princes, and men of science which was no part of the duty of his journal. That he had interfered with administrative affairs and that a repetition of the transgression would bring upon him the penalty of the law. The brave editor replies that he cannot see in what respect he has exceeded the limits of his privileges, that if he has offended, the tribunals are open for decision and Egypt is no longer a despotism; that the malady is desperate and can be met by no ordinary measures; that strong

speech is necessary that one shall be heard ; that to rectify a fault it must not be concealed but made the object of constant reflection and study ; and that having these convictions nothing will deter him from acting fully in accordance with them, no matter what may happen. These are brave words—braver probably than they appear to us, who live in a free and enlightened country, swayed by the press. We wish the noble editor success in the conflict against wrong and oppression, into which, from a sense of duty, he has been drawn, but we fear public opinion is not sufficiently enlightened in the East to follow him up in the unequal contest.

"Somebody's," Operation. — Mr. Lawson Tait has the happy faculty of keeping continually in hot water with someone. He is nothing if not argumentative, and if he accomplishes nothing else by his constant communications in the journals, he at least gets well advertised.

There is scarcely a mention of his name that does not bring forth from him a note to the editor. If Mr. Tait were an ordinary man this might be necessary, but he stands too high and has done too much, to render it necessary to answer every criticism that may be made of him. He says a good thing, however, in the last number of the *Medical and Surgical Reporter*, which redeems that letter at least. It is against the custom of calling operations after people's names. He says that nothing should be called "Tait's operation." The practice involves no leading principle nor essential detail, and it is a lazy habit and sure to breed confusion. "Operations should be named either on account of a leading principle or on account of some special, prominent and distinctive detail." Reason and science alike protest against the objectionable practice, and yet so ardent is the thirst for fame that it is not unlikely men will still be found willing to go down to posterity — as Oliver Wendell Holmes has expressed it—"like a dog with a tin-pan tied to his tail."

Miscellany.

Relation of Bacteria to Pneumonia. —Not much importance was attached to the results of bacteriological investigations of croupous pneumonia before Friedländer, in 1883, described and obtained in pure cultivation a bacterium which he found in the affected lung in a number of cases of this disease. This microorganism was described by Friedländer as a round or oval micrococcus, possessed under certain conditions of a capsule capable of being stained, and presenting the so-called nail-like growth in gelatine. Friedländer's pneumococcus, as the organism is often called, although most bacteriologists now classify it as a bacillus, was found to be pathogenic for mice and in less degree for guinea pigs and dogs but not for rabbits. Inoculations of pure cultures into the lungs of susceptible animals produces pleurisy and *lobular* pneumonia, in rare instances *lobar* pneumonia.

The belief that prevailed for a time after Friedländer's discovery that his pneumo-coccus is, if not the exclusive, at least a common cause of croupous pneumonia, has not been confirmed by later researches. It is found that the pneumo-coccus, or more properly the bacillus pneumoniæ of Friedländer, is not so readily identified by means of its morphological and biological properties as was at first supposed to be possible. Other bacteria have been discovered which can be distinguished from it only by careful and laborious procedures. Little reliance, therefore, can be placed upon much of the work apparently in support of Friedländer's views, as it is not certain, or even probable, that the observations in many of the cases related to Friedländer's bacillus. However this may be, it is certain that this bacillus cannot be demonstrated in many cases of croupous pneumonia, either in the pneumonic exudation, the sputum, or elsewhere. Even the advocates of the causative significance of Friedländer's pneumonia bacillus now admit that it is the cause of only a small proportion of the cases of croupous pneumonia. In *my* judgment it has not been satisfac-

torily demonstrated to be in any case the cause of genuine croupous or lobar pneumonia of *human* beings.

At the present time the chief interest in this connection attaches to another species of bacteria. This species is the micrococcus discovered by Sternberg, in 1880, in his own sputum, and found by him to produce a rapidly fatal form of septicæmia in rabbits—the so-called sputum septicæmia. To this organism Sternberg has given the name of micrococcus Pasteuri. Its relation to croupous pneumonia has been studied with especial fulness and care by A. Fränkel and by Weichselbaum, of whom the former designates the organisms as the micrococcus of pneumonia, and the latter as the diplococcus of pneumonia. In distinction from Friedländer's pneumo-coccus, this organism is sometimes called Fränkel's pneumo-coccus. This second pneumococcus—the micrococcus Pasteuri of Sternberg—is present in the exudation and the sputum of croupous pneumonia far more frequently than is Friedländer's bacillus. It is regarded by Fränkel as the sole cause of genuine croupous pneumonia, and by Weichselbaum as the usual cause, the latter author claiming that a small proportion of cases are due to Friedländer's bacillus. The micrococcus Pasteuri has been found as a pure culture in the exudation of cerebral meningitis complicating croupous pneumonia.

It must be admitted that the evidence in favor of the micrococcus Pasteuri being the cause of croupous pneumonia is *stronger* than that in support of Friedländer's bacillus, but does not seem easy to reconcile with this evidence the fact that the micrococcus Pasteuri has been found in a variety of conditions not associated with croupous pneumonia, viz.: in the normal saliva, in lobular pneumonia, in cerebro-spinal meningitis, in acute endocarditis, and in otitis interna. If this organism be regarded as the cause of these various diseases as well as of croupous pneumonia, the croupous pneumonia loses much of its typical or specific character. Sternberg, Fränkel and Weichselbaum consider that the occasional presence in the normal saliva of the micrococcus Pasteuri is not an obstacle to admitting the dependence of croupous pneumonia upon this organism, but on the other hand renders clearer the etiological rôle played by the accessory causes of pneumonia, such as exposure to cold, bad hygienic surroundings, old age, etc. These accessory causes they urge bring into existence the necessary conditions for the invasion and multiplication of the pathogenic organism.

The two microörganisms which have been mentioned are not the only species of bacteria which have been found in the exudation of croupous pneumonia, but they are the only ones to which bacteriologists are inclined to attach etiological significance in the production of this form of pneumonia. It is apparent that the evidence is not conclusive that either of the organisms is the infections agent of croupous pneumonia; certainly no such evidence has as yet been presented as that which leads us to accept the tubercle bacillus, the typhoid bacillus, the cholera spirillum, as the cause of the respective diseases in which alone each of these organisms has been found.—*Prof. William H. Welch, Jl. Amer. Med. Asso.*

Laparotomy for Tubercular Peritonitis.—By Dr. Herman Kümmell (Hamburg.) Since the appearance of Kœnig's paper in 1884, the treatment of peritoneal tuberculosis has under-gone material changes. While before this only a few cases had been recorded, in which, owing to an erroneous diagnosis, an operation was resorted to in this disease, there has since been a considerable increase in the number of operated cases. At the present day we are justified in regarding tuberculosis of the peritoneum as a local disease in the vast majority of instances, which, like tuberculosis of the bones and joints, may be cured by surgical means. The author's experience, supplemented by the numerous contributions of others, demonstrate that it is curable, or at any rate, capable of existing for many years without symptoms or disturbance of the patient's health. Kümmell tabulates forty cases of peri-

toneal tuberculosis treated by operation, including two of his own. Out of this number only two died of the effects of the operation (Naumann's), apparently of septicæmia the others recovered promptly. The duration of the cure varied from twenty-five years to a few months. In some cases, as for example that of Kœnig, in which there was a co-existing pulmonary tuberculosis, a fatal termination took place within a year. In Hegar's and Breisky's cases the symptoms of the complicating lung trouble were still present at the time of the report, although the patient's general health was quite satisfactory, and no local appearances (ascites) had occurred. In the other cases the patients returned to comparatively good health; there was a considerable increase of bodily weight; the ascites did not recur, and in some even the pulmonary trouble subsided.

The greater number of operations were in females, the age varying from four to fifty-six years. An error in diagnosis was frequently made, and in consequence an operation performed, the disease being mistaken for an ovarian cyst, fluid, abdominal tumor, etc. In some instances an operation was undertaken to decide a doubtful diagnosis. In the author's two cases, the tuberculosis was accidentally discovered during laparotomy for ileus. In only a few cases was the disease diagnosed and the operation systematically resorted to as a curative measure.

The objective signs of the peritoneal tuberculosis were generally those of encapsulated ascites, of cystic character. Rarely was the disease associated with general tuberculosis, and in no case was the development of the latter hastened by the operation. It is difficult to imagine why a laparotomy should be followed by these favorable results. That the antiseptic employed was not the curative agent is shown by the fact that in some of the favorable cases nothing was done beyond removing the ascites and suturing the wound. It must be admitted that the disease sometimes shows a disposition to spontaneous cure, as is shown by two of Græfe's cases.—*Archiv für Klin. Chir., Bd.* 37. *Hft.* 1. 1888.—*Int. Jl. of Surg. and Antisep.*

Tumor of the Spinal Cord; Removal; Recovery.—We are slow in getting used to the idea that under proper conditions of precaution many tumors of the brain may be removed *en masse* with the gain of life, and not the losing of it; and now, further, we must grant that the spinal cord, that most inaccessible and inviolable of organs, may be laid bare, of part of its bony covering—man may become for the time and in part an invertebrate—in order that it may be set right, not by the gentlest of manipulations, but by the surgeon's knife. At the concluding meeting of the Royal Medical and Chirurgical Society, which was held on Tuesday, June 12th, the most important paper of this session, from Dr. Gowers and Mr. Victor Horsley, was presented, relating in such detail as the novelty and complexity of the facts demanded a unique case of the successful removal of a tumor of the spinal dura mater from within the bony canal, and the complete recovery of the patient. At a previous meeting of the Society the patient, a private gentleman, an officer in the Merchant Service, had most willingly attended to show to all who cared to see them the proofs of what had been done to him, and to express his deep gratitude for the change it had made in his life. Since 1884 he had had a nearly constant pain under his shoulder blade, with long fits of agony that maddened him, as some of his friends said in all seriousness, and with no hyperbole or metaphor. He might well have been glad of some last straw to break his back, and bring him to an end; but science could break his back to more profit. After due consideration and explanation, Mr. Victor Horsely laid bare the spinal column from the third to the seventh dorsal vertebra, and cut off the fourth, fifth and sixth spinal processes with strong bone-forceps. He made his way through the laminæ on both sides, and the still more obstinate ligaments subflava, slit the dura mater up the middle line, and laid bare the spinal cord. When the opening was first made the injury had been suspected, but the tissues were healthy. That the attempt should be abandoned was coun-

selled from some quarters, but Mr. Horsley preferred to complete his task, removed the posterior part of another superior vertebra, and there found this tumor of the dura mater compressing the cord. It could easily be shelled out of its deep bed, the wound was carefully closed and drained, and healed by first intention. Slowly the great power of nervous recovery showed itself, and the pain and paralysis disappeared. This is not easy surgery; and the many details, hints, and conclusions that find a place in Mr. Horsley's paper will need careful consideration when we receive it at length in print. It was more than a summer gathering of the Royal Medical and Chirurgical Society could do to discuss it; it must be left to take its permanent place among the forward steps of the progress of the healing art.—*British Medical Journal*, June 16, 1888.

Treatment of Asthma.—The treatment of asthma is divided into treating the paroxysm, and treatment to prevent a recurrence. In treating asthma it is best always to use single remedies. It would take more time than we have at our disposal to mention even all the drugs which have been found beneficial. To relieve an asthmatic paroxysm, tobacco is one of the best. It is of course very likely that a patient using tobacco for this purpose may acquire a fondness for the weed, but if it is going to be useful in future attacks, he must not use it as a social comfort, or it will lose its effect. At times a few whiffs of a cigar will stop the paroxysm, but as a rule the smoking must be continued till constitutional effects are manifested by a depressed circulation, cold perspiration and nausea. If the heart is weak this remedy must not be employed; smoking Datura Tatula is often very useful. Stramonium—smoking the leaves is also a common remedy. They may be smoked alone in a pipe or in cigarettes, or the leaves may be mixed with tobacco and made into cigars. In the same way the leaves of Hyosciamus and Belladonna have been found valuable. The most common remedy is saltpetre paper. A saturated solution of nitrate of potassium is prepared, and in this is soaked blotting paper, which is then dried and cut into strips; when lighted, those strips burn slowly, and the patient inhales the smoke. Some advise a very small proportion of arsenic to be added to the saltpetre solution. Cocoa leaves are also advised to be smoked, mixed with ordinary tobacco. The latest remedy is pyridene. This is used in quantities of a drachm, and vaporized on a hot plate in a closed room. It is said to be very useful. Emetics are sometimes found useful, and perhaps the best is Tartar Emetic. Nitrite of Amyl is often very serviceable in relieving a paroxysm. Nitro-glycerine gt. 1 of a 1 per ct. Sol. is recommended also. Sudden fright has been known to instantly cure a paroxysm. Chloral Hydrate, where the heart is not diseased or weak, in doses of 15 to 20 grs. is very good; ¼ gr. of morphia combined with $\frac{1}{200}$ of a gr. of sulphate of atropia will, as a rule, cut short an attack. If frequently used there is the danger of the Morphia habit, which is much worse than an attack of Asthma, bad as it may be; stimulants are bad, and never should be used. To prevent the return of the disease, there are several useful remedies, and first on the list stands arsenic, which must be continued for several months. Ammonium Bromide is well spoken of. The Bromides are eliminated by the bronchial mucous membrance, and are believed to exert a local anæsthetic effect. Potas. Bromid. is also used. Cimicifuga, a plant indigenous to this country, is a remedy not so much used, as I think it deserves to be. Quinine may be used both during a paroxysm and afterwards. If an attack is expected, say about one in the morning, a full dose of Quinine at 9 o'clock the preceding evening will sometimes prevent its coming on, or it may only modify the severity of the attack. It sometimes fails to have any effect. Another remedy introduced during the last few years is Grindelia Robusta. It is highly spoken of, and may be given in doses of ½ a drachm of the Fid. Ext. several times a day. In some patients who are sufferers from Hay Asthma or Hay fever, there has been recently found

hypertrophy of certain portions of the schneiderian membrane. These hypertrophied points, are believed to be potent parts of irritation, and their destruction, by means of the galvano-cautery, has been followed by excellent results. This is a very recent advance on the pathology of this disease. Still more recently it has been suggested that possibly, in ordinary asthma, these points of hypertrophy may also exist in the tracheal and bronchial mucous membrane. These points cannot of course be reached by the cautery, but it is suggested that this condition can be remedied by the persistent inhalation for months of the vapor of Iodine and Carbolic Acid. It is theoretically a good practice. I have seen hypertrophied tonsils greatly improved by this inhalation. Attention to diet is important. Indigestible articles must be avoided, and asthmatics must absolutely avoid eating before going to bed.—*Prof. F. W. Campbell, Canada Med. Record.*

Artificial Feeding of Infants.—Dr. A. Jacobi, of New York, in a paper on the "Therapeutics of Infancy and Childhood," in the *Archives of Pediatrics*, says:

The principal substitutes for breast-milk are those of the cow and goat. The mixed milk of a dairy is preferable to that of one cow. Cow's milk must be boiled before being used. Condensed milk is not a uniform article, and its use precarious for that and other reasons. Goat's milk contains too much casein and fat, besides being otherwise incongruous. Skimmed milk, obtained in the usual way, by allowing the cream to rise in the course of time, is objectionable, because such milk is always acidulated. The caseins of cow's and woman's milk differ both chemically and physiologically. The former is less digestible. There ought to be no more than 1 per cent. of casein in every infant food. Dilution with water alone may appear to be harmless in many instances, for some children thrive on it. More, however, appear only to do so; for increasing weight and obesity are not synonymous with health and strength. A better way to dilute cow's milk, and at the same time to render its casein less liable to coagulate in large lumps, is the addition of decoctions of cereals. It has been stated before, that a small amount of starch is digested at the very earliest age. But cereals containing a small percentage of it are to be preferred. Barley and oatmeal have an almost equal chemical composition; but the latter has a greater tendency to loosen the bowels. Thus, where there is a tendency to diarrhœa, barley ought to be preferred; in cases of constipation, oatmeal. The whole barley-corn, ground for the purpose, should be used for small children, because of the protein being mostly contained inside and near the very husk. The newly-born ought to have its boiled milk (sugared and salted) mixed with four or five times its quantity of barley-water; the baby of 6 months equal parts. Gum arabic and gelatin can also be utilized to advantange in a similar manner. They are not only diluents, but also nutrients under the influence of hydrochloric acid. Thus in acute and debilitating diseases which furnish no, or little, hydrochloric acid in the gastric secretion, a small quantity of the latter must be provided for.—*Jl. Am. Med. Association.*

Cocaine In Tracheotomy.—Lennox Browne states that since the introduction of cocaine, neither he nor his colleagues at the Central London Throat and Ear Hospital have employed chloroform when performing trachetomy, substituting for it five minims of a ten per cent solution of cocaine on each side of the immediate region at which the trachea was to be opened. Ten or twelve minutes were allowed to elapse before commencing an operation, and in the majority of instances pain was not felt during any stage of the operation. Besides its local action as an anæsthetic, cocaine used in this manner has the effect of diminishing hemorrhage during the operation by contracting the blood vessels, whereas with ether or chloroform the contrary is produced. It also quiets the breathing and steadies the larynx in

cases in which the respiration is seriously hurried.

Lennox Browne's experience with cocaine in tracheotomy, covering forty cases, in hospital and private practic, and the fact that he saw but one case in which the toxic action was at all observed, which was at once remedied when the trachea was opened and a full flow of air admitted into the lungs, would greatly militate in favor of the employment of the drug in the manner described.—*British Medical Journal, April* 7, 1888.

The Treatment of Typhoid Fever by Carbolic Acid.—Dr. Gramshaw recently published the results obtained by him in the course of seven years, in 116 cases of typhoid fever treated by him with the following formula: Carbolic acid 12 minims, tincture of iodine 16 minims, syrup of orange peel and water to eight ounces. Of this mixture he gave an ounce every four hours. The good effect is manifested almost immediately, in a fall of the temperature, a lowered pulse-rate, and a cessation of the diarrhœa. The treatment is evidently based on germicidal theories, though the strength mentioned when mixed with the gastric and intestinal secretions, would not be such as to interfere with the comfort of these stalwart microbes—if microbes there be. Turning, however, to his results—for the proof of the pudding is in the eating—out of the total number of 116 patients, 17 were children, 10 adolescents, and the remainder adults of both sexes. Of all this number, only one proved fatal, and even in that instance the death was due to something else, a stomach-ache perhaps. With such figures to work from there ought to be a rush on the part of practitioners to give their patients the benefit of Dr. Gramshaw's discovery. Mortality of less than one per cent. is extraordinary, if with the mildest forms of the disease. There is plenty of scope for inventive geniuses in the matter of medicinal treatment for typhoid fever, for at present it may safely be said to be purely expectant. —*Medical Press.*

The Value of Vaccination.—Zurich, according to a daily contemporary, is beginning to suffer from the effects of neglect of vaccination. Until 1883 a compulsory vaccination law was in force, but in that year it was repealed, the success of the anti-vaccinationists depending, we were told, upon the fact that not a single case of small-pox occurred in 1882. But in 1883, in every 1000 deaths, 2 were caused by small-pox; in 1884 there were 3 in every 1000; in 1885, 17, and in the first quarter of 1886 there were 85 deaths. While Europe is exhibiting folly by showing in some localities opposition to vaccination, Japan is deriving benefits from recognition of its value. Nagasaki, we learn from another contemporary, possesses a governor, named Kusaka, who is bent upon ridding the town of the diseases which formerly infested it. By means of a system of compulsory vaccination, vigorously enforced by the governor, small-pox, long a familar scourge in the old town, has been practically stamped out. In England we may expect soon to have the opportunity of considering the effects of small-pox on vaccinated and unvaccinated communities respectively, for certainly some of our towns are slowly returning to the condition of being unprotected against small-pox. The result of this change will be first shown in the difference in the ages of persons dying from small-pox; in the unvaccinated communities it is the younger members who would chiefly suffer; in the vaccinated, the older. Germany, on the other hand, is showing the effects of revaccination, and hitherto the freedom of German towns from small-pox has contrasted in a marked degree with a larger prevalence of this disease in other European towns where revaccination is not enforced. Probably the outcome of the experience of the present generation will be the enforcement of revaccination in the majority of European countries.—*The Lancet.*

At Fürth, where the manufacture of looking-glasses is extensively carried on, Professor Kussmaul did not find an instance of a worker in mercury contracting syphilis while under the mercurial influence.—*Brooklyn Med. Jour.*

Medical Items.

Doctors who wish to report their cases in the journals are compelled to be very careful in France. The Criminal Court of Besançon has recently fined an alienist $100, and compelled him to pay the family $400 damages for having described, under the title, "An observation on rational lunacy" (*folie raisonnante*), a case in such a manner that the identity of the patient was discovered.

The "Schweninger" treatment for Obesity is, as most physicans know, a treatment stolen by a quack, Schwenninger, from the distinguished physician Oertel. It consists in a rigid limitation as to the amount and quality of the food, and the abstinence from water at meals. We are pleased to learn from the public press that Dr. J. W. Gibbs, a graduate of the Eclectic Medical College, and a politician, "was the man who brought the Schweninger system here, having gone over to Germany for the purpose of getting it, and purchased the knowledge of it from the originator." —*Medical Record.*

Multiple births seem to be the order of the day; but the wife of a workingman living at St. Julien de Varaville (Manche) probably beats the record with a delivery comprising four male and one female children. Three were born on the 4th and the two others twenty-four hours later. In four confinements this productive female has borne eleven children. A subscription is being set on foot for the unfortunate husband.—*Medical Press and Circular.*

The Kentucky State Medical Society has elected the following officers for the ensuing year: President, Dr. L. S. McMurtry, Danville; First Vice-President, William Bailey, Louisville; Second Vice-President, B. W. Stone, Hopkinsville; Permanent Secretary, Steele Bailey, Stanford; Assistant Secretary, S. M. Letcher, Richmond; Treasurer, John G. Cecil, Louisville; Librarian, T. B. Greenly, West Point; Censors, H. Brown, Houstonville; H. B. Evans, Riley Station; F. H. Clark, Lexington; Chairman of the Committee of Arrangements, J. M. Foster, Richmond, with authority to fill vacancies. Richmond was chosen as the next place of meeting, and the date the second Wednesday in May, 1889.

The American Otological Society has elected the following officers for the ensuing year: President, Dr. J. S. Prout, of Brooklyn; Vice-President, Dr. Gorham Bacon, of New York; Secretary and Treasurer, Dr. J. J. B. Vermyne, of New Bedford, Mass; Committee on Membership, Dr. A. Mathewson, Dr. D. B. St. John Roosa, and Dr. John Green; Delegate to Congress of American Physicians and Surgeons, Dr. W. H. Carmalt, of New Haven; Alternate, Dr. G. Bacon, of New York. The Society meet at the Arlington Hotel, Washington, D. C., Tuesday, September 18, 1888.

The first general meeting of the recently constituted British Laryngological and Rhinological Association was held in the rooms of the Medical Society of London, on June 29th, the chair being occupied by Dr. W. McN. Whistler, and subsequently by Mr. Lennox Browne. The principal business was the election of officers and Council. The ballot resulted as follows: President: Sir Morell Mackenzie. Vice Presidents: Mr. Lennox Browne, Dr. G. Hunter Mackenzie, and Dr. P. C. Smyly. Council: Dr. T. Whipham, Dr. Woakes, Dr. E. Cresswell Baber, and Dr. J. McIntyre. Honorary Secretaries: Dr. R. A. Hayes and Mr. George Stoker. The draft rules were discussed, amended and adopted.—*Brit. Med. Jl.*

Three nationalities claim the honor of the discovery of chloroform, and all are probably entitled to it. Liebig, in Germany, published the discovery in November, 1831. Soubeiran, in France, published a paper on "ether bichlorique" in the *Annales de Chimie et de Physique* for October, 1831, which was not issued until January, 1832. Dr. Samuel Guthrie in America published an article in the October number of the *American Journal of Science and Art* for October, 1831, on "a new mode of preparing a spirituous solution of chloric ether," in which it is stated that he has been experimenting at least six months with the compound described as "chloric ether," which was in fact chloroform. To our countryman, therefore, belongs beyond question the honor of priority in the discovery of the prince of anæsthetics.—*The Pharmaceutical Era.*

Dr. Debove has something new to proprose in the treatment of chronic forms of diarrhœa. He says: "I have found the means used for the treatment of diarrhœa to be just as numerous as they are insufficient, and I concluded it would be well to attempt to stuff the intestines with some inert powder that would not be attacked by the intestinal juices." He settled on talc, which is a silicate of magnesium. This was given in doses of from six to eighteen ounces a day. It is finely pulverized and soft, and given in portions of six ounces to a quart of milk, great care being taken to add the old formula, "to be well shaken before taken." The amount of six ounces is usually enough to obtain a complete success in phthisical patients who get diarrhœa. It is interesting to note that many of these patients could not tolerate the milk treatment nor cod-liver oil, as they caused diarrhœa, but that after the administration of talc they got on very well, both with milk and with the oil, some of them taking as much as a pound of oil in twenty-four hours afterward, when they could not stand a moderate dose before without producing diarrhœa. The talc is a very light powder, and is eliminated in twenty-four hours, when the stools will be found quite white. It does not remain stationary in the bowels, but causes constipation, which, however, is not to be feared in such cases as M. Debove used it in, as the diarrhœa was of organic cause and almost certain to return, kept up as it was by intestinal ulcerations. The use of talc was continued for some time in many of the cases, but it has not yet been tried in children nor in diarrhœas of hot climates, such as dysentery, etc.—*Paris Cor. N. Y. Med. Jl.*

Selected Articles.

ON CLINICAL THERMOMETRY, AND THE TAKING OF TEMPERATURES.

BY SURGEON-MAJOR BOILEAU, B.A., M.D., &c., ARMY MEDICAL STAFF.

The "One-minute" Thermometer delusive, and dangerous to use.—Axillary Temperatures v. Mouth Temperatures.—Time required for a Correct Observation.—The Temperature of the Human Body.

It is now many years since I became interested in clinical thermometry. My first temperature charts, the result of thousands of observations, appeared in the eight volume (1866) of the Army Medical Department Reports, and I believe they were the first systematic series of charts published by any medical officer in the public services. But in saying this I am open to correction. Be this as it may, I have, at all events, for some five-and-twenty years been taking temperatures with all sorts of thermometers, and in many different parts of the globe, including the East and the West Indies, the Mediterranean, North America, and at home.

My first remarks will now be on the so-called "one-minute" thermometer; and concerning this I had almost written two years ago, but decided not to do so, believing the instrument would soon cease to be advertised; but, the advertisements still appearing, I have changed my mind. The instrument is not only more advertised than ever, but we have now offered to the profession a "half-minute" thermometer, and its use is apparently sanctioned by high authority. In a recent issue of a contemporary, a Berlin correspondent, writing on the health of the German Emperor, says, "The temperature is always taken in the mouth with a 'half-minute' thermometer, which was given to Sir Morell Mackenzie by an eminent surgeon during his last visit to England. * * * All the physicians are now, however, unanimous in their approval of the 'short-time' thermometer, and it alone is used in the case." The advocates of this thermometer claim that it will register the temperature of the human body in one minute. "To any medical man who has an extensive practice, this is a great desideratum." "By this latest improvement the time required to mark the maximum temperature is reduced to *one minute*." "This thermometer is guaranteed to take the maximum temperature of patients in *one minute*." In such terms are its supposed advantages set forth.

Now, a thermometer can only register the temperature of the heat to which it is exposed. It cannot register the maximum temperature of any body until that maximum is reached, and the maximum temperature of the human body, or of the mouth, is not reached until it is covered up or closed for some time, and this time is more than a minute—some would say ten minutes. That the "one-minute" thermometer will register the existing temperature of a body in one minute is true; but the same is true of any other clinical thermometer—even a common bath or garden thermometer will do this. Take a tumbler of warm water, say at 100° F.; plunge any clinical thermometer into it, and you will find that the temperature of the water is registered in less than a minute, probably in less than half a minute. This necessarily happens on account of the very low specific heat of mercury and its high conducting power. The "one-minute" thermometer possesses in this respect for clinical purposes no advantage over any other thermometer, and to suggest that it does is to mislead, and to imagine that it can give the maximum temperature of patients as it is ordinarily obtained is delusive. It is not merely the temperature of a given part of the body that we desire to know—it is the maximum temperature of the part when removed from the cooling influences of the surrounding air, and it takes some time longer than a minute to get it. When a thermometer is first placed in the axilla, that part of the body has been usually more or less exposed to the external air; when the elbow is brought to the side to exclude as much as possible all external cooling influences, the

temperature of the axilla begins to rise, and in five or more minutes it reaches a maximum. How can this maximum (the temperature required for the purposes of diagnosis and prognosis) be measured by any instrument until it is attained? Yet we are asked to believe that the "one-minute" thermometer will do this; that it will give the temperature of the patient, the temperature which is to guide the physician, in one minute; and the instrument is distinguished for this important practical purpose from all other thermometers. This is altogether wrong; but it is worse than wrong—it is, in its possible consequences, dangerous. As it cannot give the required temperature in one minute, a lower temperature is accepted, and this may be one, two, or more degrees below the proper temperature. A nurse, dresser, or patient using this "one-minute" thermometer gives the temperature recorded by it in one minute to the physician, and what may be the consequence? A temperature of 100°, say, is given in place of 102°, or perhaps, what is worse, a temperature under 99°, when the correct temperature is 101° or more. The inference may be that the patient is improving or convalescent, when in reality he may be getting worse, perhaps running into danger, and the anxiety and watchfulness which would result from a knowledge of the real state of things is replaced by a false security, created by the misleading record, and thus the welfare of the patient jeopardised.

When I first saw the advertisement of this "one-minute" thermometer in the *Pioneer* of India, the thought occurred to me, What new physical property has been discovered in mercury that will enable it to fulfil such a purpose? I accordingly sent to Bombay for one, and found, of course, as I had surmised, that it was simply an instrument somewhat more sensitive than the ordinary clinical thermometers, but in no other way possessing unusual qualities, except the disadvantages of much increased fragility and greater cost. This property of increased sensitiveness might be of some use in certain delicate philosophical experiments in which alternating waves of heat and cold had to be measured by seconds, but for clinical purposes it is of no use whatever. Far from being useful, it is likely to be a source of danger.

These thermometers are largely advertised, and, I believe, have an extensive sale, and I know that a power is attributed to them which they do not possess. On one occasion, a few years ago, I gave a lecture and demonstration on these instruments to the officers of the subordinate medical department in a large station hospital in Bengal, and I found that one of the assistant apothecaries doing duty in the hospital was actually in possession of one of them, having lost no time in procuring one on seeing them advertised. This officer had a large number of temperatures to take morning and evening, and he was greatly pleased, as well he might be, that there seemed to be a means of very much curtailing the time necessary for the work. On hearing what I had to say on the fallacy of observations so taken, he produced it, and I was afterwards informed that the agent took it back. I cannot believe there is any intention to mislead in connection with the sale of these thermometers; the makers probably believe the instruments can save time, and are therefore superior to all other thermometers. I have been assured over the counter most ingenuously that "it gives the temperature in one minute, the others take three minutes."

All that I have said concerning the fallacy and danger attending observations made by these thermometers in the axilla applies *mutatis mutandis* to observations made in the mouth, and they apply with double force to the "half-minute" thermometers. If these thermometers are used as any other thermometers are used they of course answer the same purpose, but they are costly and easily broken, and in those that I have seen the index is set with unusual difficulty.

As to the best part of the body from which to take temperatures, I am decidedly in favour of the axilla. I think the only defense that can be urged for taking them in the mouth—and it is but a poor excuse—is that the practice is con-

venient, and that it saves trouble; and there is no doubt about this. A person, say, is before you; perhaps a woman in walking dress, or a soldier in his great coat. It is far easier to put a thermometer into the mouth than into the axilla with the usual precautions; and this is the only reason I can see for taking sublingual temperatures. The practice has, however, so many disadvantages that such considerations should have no weight. In the first place, is it not most desirable that there should be uniformity in the taking of temperatures, in order that all should be directly comparable? Is it not desirable that all temperatures should be referred to one standard? It is worse than inconvenient that some observers should make a practice of taking axillary, and others mouth temperatures. They are not comparable without certain considerations; and, as I believe and hope that the majority of observers agree that the axillary temperature gives as true an index of the blood heat as is needed, it would be well if the practice was universal; but this is perhaps the least that is to be said in its favour. There are the following considerations. When you place a thermometer in a person's mouth, you shut his mouth in more senses than one. Whilst the temperature is being taken the patient must be silent, and it really is sometimes distressing to see the practitioner standing by watching the speechless subject, who is, moreover, often very uncomfortable, for many people cannot breathe at all easily with their mouths closed. All this is avoided by taking the temperatures in the axilla. Again, the instrument is more likely to be broken in the mouth than in the axilla. This is the case with children, in cases of delirium, of partial or complete insensibility, certain spasmodic affections, &c. Last, but by no means least, there is the offensiveness of the practice—be it even in the idea only. Is it not objectionable to retain in the mouth an instrument that has been in another person's mouth? Most people object to any but their own toothbrush, even to one belonging to a healthy member of their own family; how much stronger must be the objection to keep in the mouth for some minutes an instrument that in all probability has been recently in the mouths of half a dozen more or less diseased persons. Who would knowingly keep in their closed mouth a thermometer that had been in the mouth of a patient suffering from diphtheria, scarlatina, cancer or syphilis, various forms of ulceration and suppuration, or of dyspepsia with foul breath and loaded tongue, &c.? It is no justification to say the thermometer is always thoroughly cleansed first; for, as a matter of fact, this very necessary measure of precaution is sometimes neglected. It must be remembered, too, that a clinical thermometer cannot, like other instruments, be placed in hot water for the purpose of cleaning it; and it requires very hot water indeed to destroy the contagium of disease. Nor is it in every house that sufficiently powerful disinfectants are always at hand in which to place the thermometer before use. Even apart from the possible danger of disease transmission, the ideas suggested by the practice are, to say the least, disagreeable. No such objections apply to taking the temperature in the axilla. A perfectly clean thermometer is at all times desirable, but, should it not be quite clean, the axilla is a much safer place for it than the mouth.

The allegation that in the mouth a more correct temperature is obtained than in the axilla may or may not be true; it is not of sufficient force to be an argument against axillary temperatures. The temperature of the blood one cannot get; at best we can get only an index to that temperature, and the axillary index is as reliable as the sublingual. The cases in which we cannot take axillary temperatures compared with those in which we cannot or unquestionably ought not to take mouth temperatues are very few indeed. I would not allow any medical student, nurse or dresser, to take sublingual temperatures. I would teach them from the time they first took a clinical thermometer into their hands that the axilla is the proper place to take all temperatures. Uniformity of observations and safety would

thus be secured. If some take temperatures in the mouth, some in the axilla, and some elsewhere—some for one minute, others for five, and others for ten,—it is hopeless to expect that we shall ever have standard charts of reference, to say nothing of the evil consequences of misinterpretations. It is a matter of surprise to me that so many practitioners still take mouth temperatures, and still more surprising is it to hear them depreciating the value of observations made in the axilla.

With regard to the precautions to be attended to in taking axillary temperatures, I will only refer to the one which concerns the time necessary to get an observation that may be relied on for medical purposes. From a very large number of observations that I have made and graphically traced I hold that five minutes are sufficient for every practical purpose, and that it is a waste of time to occupy a longer period in an observation. It can be easily proved. Take an ordinary temperature chart, and let each vertical space represent an interval of fifteen seconds. Let an assistant place any clinical thermometer in the axilla of a patient with some feverish affection, and closely watching the rising mercury call out its height every fifteen seconds from the moment of commencing the experiment. Let this be continued for ten minutes. If a graphic representation of the numbers so obtained be now made on the chart, a paraboloid curve will be projected. Obtain several of these under various circumstances, and if an inspection of the whole will not convince an unprejudiced observer that, for all practical purposes of diagnosis and prognosis, a carefully made observation of five minutes is sufficient, nothing will persuade him.

Although the remarks which I have made above on the fallacy attending conclusions drawn from the "one-minute" thermometer are true, it is also true that reliable temperatures may be taken by the application of a thermometer to the axilla for only one minute. A knowledge of this fact will sometimes be of use in saving the time of those who have charge of many patients. It is, for instance, possible to take with one thermometer the temperature of a dozen patients in about twenty minutes, whilst ordinarily it would take over an hour. To do so, the patients should be told (under such circumstances as admit of this method of procedure, and with or without the aid of assistants) to bring their elbows to their sides, and place their arms in the usual position. Whilst the medical man is occupied five minutes in taking the temperature of the first patient, the armpits of the remaining patients are, so to speak, heating up and acquiring their maximum temperatures. It will be sufficient then to place the thermometer in the axilla of all but the first for little more than one minute, and thus one can pass from patient to patient, observing correctly the temperature of each in one minute, and it does not require a "short-time" thermometer to do this; any ordinary clinical thermometer will do it. It must be remembered, however, that the thicker the glass of the thermometer the slower it registers. Of course this quick method of taking temperatures must be done with all necessary precautions. They are obvious, and the person who neglects them would neglect a good many other things.

Finally, as to the axillary temperature of the human body in health, my experience goes to prove that it is always under 99°F. both in the tropics and in cooler regions. Numerous observations made by me in the plains of Bengal fully bear out the conclusions I arrived at fifteen years ago—conclusions which were then published. My observations have now been made in very different climates, under conditions of heat and moisture the most varied; in places where the true shade temperature was very often over 100°; in places where a temperature many degrees below zero was not uncommon; and in places where the hygrometric state of the air, as indicated by the difference between the dry and the wet bulb thermometers, varied from 0° to 60°. I believe, therefore, I am correct in maintaining that the temperature of man is not higher in the tropics than elsewhere, notwithstanding the belief of those who still accept the teaching

of Dr. John Davy. For further information on this subject, I would refer to papers of mine in *The Lancet* of Aug. 23rd, 1873, and April 23rd, 1878; also to an important paper in the eighteenth volume of the Army Medical Department Reports, published in 1878, by Surgeon-Major J. Crosse Johnston; and to communications from Surgeon-General Furnell, of the Madras Army, and others, in *The Lancet* of the same year. —*Lancet*.

Clinical Lecture.

CLINIC OF WOMAN'S MEDICAL COLLEGE OF BALTIMORE.

Cancer of Pylorus. Acute Lobar Pneumonia at Apex of Right Lung, with strong Tendency to Phthisis, but Perfect Recovery. Pernicious Intermittent Fever.

SERVICE OF PROFESSOR CORDELL.

Gastric Cancer.—I present you today this interesting specimen of Cancer of the Pylorus. I will first recall to your mind the facts connected with the case. July 11th, F. J., a pure negro, act. 37, presented himself at the out-patient department of the Hospital of the Good Samaritan, complaining of constant vomiting of his food. He was a barber by occupation and his trouble began a year before, while he was at the sea-shore. He first noticed an inclination to vomit and says that when he went out of his shop and ejected the contents of his stomach he felt easier. His habits had been very dissipated; he had drunk much whiskey and beer, and some gin but not much of that. He was very constipated, hardly ever having an operation. He had fallen off very much; looked thin and emaciated and said he felt "weak and miserable." His appetite was good but he could not retain enough nourishment to satisfy his hunger. He did not throw up at regular hours or immediately after eating but some hours after meals, and then a large quantity of "sour-smelling matter," half-a-basinful at a time. He usually threw up early in the morning between 6 and 7 o'clock. He had never vomited any blood. He complained only of a dull pain in the epigastrium and at a corresponding point behind, but had had no severe or shooting pains. He said that his stomach swelled, especially after eating and then he would belch up much wind and he could not button his pants.

Examination of the abdomen at 11 A. M. revealed the following condition of things: Abdomen not swollen and there was no ascites. A distinct tumor felt in the epigastrium, in the median line, above the umbilicus. It presented an uneven, somewhat nodular surface, was longer horizontally than vertically. Its length was about two inches and a half, its breadth about one and a quarter inch. On deep inspiration, it descended about one and a half inch. It was somewhat tender on pressure. Tympanitic resonance over the stomach showed that organ to be enlarged. The liver was not enlarged, the vertical dulness in the mammary line being exactly four inches; it was not lobulated nor did it extend below the ribs. There was no connection between the epigastric tumor and the liver. He did not know of any cancer in his family. A diagnosis of cancer of the pylorus was made. He was ordered to adopt a nutritious and concentrated diet consisting of raw or soft-boiled eggs, beef-tea, fresh meat, rare and cut up fine, bread and butter, all in small quantities and at short intervals, to take but little fluid and to avoid articles causing eructations. After eating he was directed to take ten drops of dilute hydrochloric acid and fifteen grains of subnitrate of bismuth.

On the 17th July, as he appeared to be losing ground, he was admitted as a free patient into the wards of the Hospital. A consultation was now held with Prof. Winslow, and it was decided to offer him the chance of an operation. (The operation proposed was that of attaching the small intestine to the stomach and making a gastro-intestinal fistuta. This was, of course, only a palliative measure, occupying somewhat the same position as lumbar colotomy in

cancer of the rectum). Notwithstanding the patient's knowledge of the desperate nature of his disease and although he had been anxious at first to have the tumor "cut out," he now declined to permit any operation. He lingered until the 3rd of August, dying of slow starvation.

During his stay in hospital his diet was entirely liquid, an egg beaten up with whiskey, or milk punch or beef tea, in alternation every 2 hours and followed by the hydrochloric acid. He was also given nutrient injections of egg, beef tea, acid and pepsin. Creasote was substituted for the bismuth and given every 4 hours. An important measure of treatment was gastric irrigation. Every other day his stomach was thoroughly washed out by means of a stomach tube. This is much simpler and quite as efficient as the rubber and funnel arrangement recommended in the books. The tube is made of the same material as the "gum" catheters, is about 30 inches long and provided with a funnel-shaped extremity. Placing this for a few moments in warm water, then greasing it well with vaseline, it is pushed backward and downward behind the tongue, the patient's head being thrown well back and held by an assistant. When about two feet of the tube have entered, the contents of the stomach begin to flow from the funnel end. Lukewarm water is then poured into the funnel end, as much as the stomach will hold (about 1 quart in this case), and as the fluid begins to flow out the head is brought forward, and downward, so as to allow the fluid to flow into a bucket placed between his knees. This is repeated two or three times until the water comes out clear. Although there was some trepidation and a good deal of gagging in this case, when the tube was first used, the operation was very easy and it gave the patient such relief that he was glad to have it repeated. In passing let me call your attention to the fact that this tube answers all the purposes required in washing out the stomach, whether in cancer, dilatation or poisoning, it is incomparably cheaper and safer than a stomach pump and it is always ready for use. I would advise you strongly to procure one and keep it in your office, for the emergencies that sooner or later you will be sure to meet with.

In spite of these efforts, however, the patient grew rapidly weaker and more emaciated, although the vomiting was reported to be less constant. For the last week he was much out of his head, talking at random and requiring constant attention. He also suffered from retention of urine, requiring the use of the catheter.

The *post-mortem* examination was made the day after death. The stomach was found to be dilated; it contained about a gill of brownish fluid, of the appearance and consistency of thick broth. The pylorus is the seat of a tumor, corresponding to the diminsions made out during life. It also involves about two inches of the duodenum. There is no ulceration, but you will observe several small patches in the vicinity of the pylorus, where a buff-colored deposit or growth is visible through the mucous membrane, and here is a larger patch that looks like a false membrane. The pyloric canal is nearly obliterated; it will just admit the blow pipe of the post-mortem case. Water poured into the stomach slowly disappears through the pyloric extremity. The liver appeared healthy and there were no secondary deposits visible. The mesenteric glands were not enlarged. The bladder was distended with urine and there were some peritoneal adhesions over its surface. All the symptoms and the *post-mortem* appearances in this case point to malignant disease of the stomach, which, doubtless, the microscopic examination will confirm, yet it is proper for me to state that in some very rare cases of cirrhosis of the stomach, where the over-growth of fibrous tissue is massed at the pylorus, analogous symptoms and appearances to those characterising this case are found and habits of intemperance are especially potent in producing this affection.

Acute Lobar Pneumonia at Apex of Right Lung, mistaken for "Malarial Fever." Phthisical Family History.

Perfect Recovery.—I will read the record of this case, as contained in our note-book. L. H., a light-colored female, single, aged 16, took cold from getting her feet wet in washing off a pavement Dec. 8th. Her menses, which had just appeared, ceased and cough, fever, pain in the chest, etc., developed. Dec. 11th she presented herself at the Clinic of the Woman's Medical College. Her temperature was found to be 104.1°, and pulse 140; she was troubled with a frequent cough, which caused pain at the summit of the chest on the right side. She was spitting up much thick, adhesive mucus, which was not rusty. Had not spat up any rusty sputa or blood. She had a marked phthisical family history, her father and two of her sisters having died of phthisis. She said she had had a cold like this the previous winter, when she coughed up a little blood-tinged mucus, and she had had a slight cough since that. Her appetite was poor. There had been no loss of flesh. The physical signs were dulness on percussion at the summit of the right lung, with subcrepitant râles, bronchial respiration and bronchophony. No crepitant râle was audible. Now with such an array of symptoms and signs there need be no difficulty in making the diagnosis of Acute Pneumonia, and yet you will be surprised when I tell you that the patient was referred to me with the statement that she had "malarial fever." Of course such an error could only have occurred by the negligence of the examining physician. Misled by apparent mildness of the symptoms and the attendance of the patient at the clinic, and overlooking the significance of the chest symptoms, the previous attendant had hastily concluded, that it was a case of "malarial fever," which, with many, is too ready a resource for cases which are ill-defined. Let me impress upon you the lesson to be learned from this incident: not to be hasty in coming to conclusions and to take account of all the symptoms and signs before deciding upon your diagnosis. The symptoms here were sufficient to direct attention to the lungs as the probable seat of disease and the practiced ear of the physician who first saw the case, if applied to the situation where the patient experienced pain, would readily have detected the signs of pneumonia.

Another interesting point in connection with this case is that the patient was able to be out. Usually acute pneumonia produces so much depression and debility and such pain and discomfort that patients are compelled to take to bed at its first onset and remain there a week or more. In this respect the case was unique in my experience. I do not remember ever to have encountered a case of genuine acute lobar pneumonia where the patient was going about during the height of the disease.

You observe the very marked tendency to phthisis manifested by this patient's family history. The inflammation of her lungs itself is an indication of a peculiar susceptibility on their part to take on disease. Further the location of the pneumonia at the top of a lung is a highly suspicious circumstance. As a rule to which there are but few exceptions, pneumonia is a disease which shows a strong predilection for the lower parts of the lungs. Of 121 cases observed by Flint, for instance, in 11 only was the disease limited to an upper lobe. Yet we must not jump to conclusions even here, and the course of the case before us will show that even with such a tuberculous tendency as this patient has there may be complete recovery.

The treatment adopted for the case was the application of mustard to the chest and powders of Dover's Powder and Nitrate of Potash internally. The patient again visited the clinic on the 13th, after which I saw her at her home, not as a matter of necessity, for she would have continued to come to the clinic had I desired her to do so, but because I thought it safer for her to remain at home and in bed.

I will not give you all the details of the case which presented nothing remarkable. It progressed favorably. By the 17th her fever had subsided, her pulse was 90, her skin cool, her appetite had returned and she felt much better. There was still dulness with bronchophony and a loud crepitant râle *redux*.

The fever powders were now stopped and compound tincture of cinchona was ordered instead, whilst the seat of disease was ordered to be painted with dilute tincture of iodine twice daily. On Dec. 18th she was able to present herself again at the clinic with still further improvement in her symptoms. I wish you to note that the patient, who presents herself only at my request after several months in order that you may see her present condition, appears in perfect health; she says she is entirely free of any symptoms of disease and she has been constantly at work ever since her recovery from her sickness.

Pernicious Intermittent Fever.—The third case I am not able to present to you in person, but I will ask you to take my word for the truth of the statements I shall make regarding it. You will doubtless remember the case of a poor negro, who was brought to the clinic three weeks ago, which I pronounced to be one of "congestive chill." He was in a pitiable condition indeed. He tottered across the room, his voice was so weak that he could scarcely speak above a whisper, his complexion was ashy and his extremities cold. I asked one of the class to take his pulse and temperature; she did so and reported to me that the pulse was about 72 and that she could not get the temperature as the thermometer did not change. I then examined the pulse and found it to be 126. Owing to the feeblesness of its beats, the student had failed to detect many of them, but by listening to the heart itself I was able to ascertain the true number. The statement in regard to the temperature was correct. The instrument used was one of those bearing the certificate of the Kew Observatory and therefore reliable. It registered only to 95°, and therefore we were unable to say exactly what the temperature was but it was some degrees lower than this. With some difficulty we ascertained from the patient and the boy who accompained or rather led him, that he had been employed on a vessel down the Bay and that he had had chills and fever for over two weeks; that he had managed to get up to the city but being entirely without means none of his colored friends or acquaintance would take him in; that the chills occurred daily—"quotidian" form—and the stages were well marked; that he had been subject to the disease every year; that others on the vessel had it as well as he; that at first the intervals between the daily attacks were well marked and he was able then to resume his work but lately they were less distinct and he had been too weak to do anything. We managed to secure a little of his urine which we found to be albuminous. He complained of nausea and had vomited before we saw him.

This man was evidently suffering from collapse or a condition approaching it. There could be only one conclusion regarding his case and that was that he was suffering from what is commonly called "congestive chill." His condition was extremely serious and I knew that unless he had proper care and attention the prognosis was in the highest degree unfavorable. Fortunately this institution is provided with the means of caring for such poor unfortunates. Through a fund derived from the "Hospital Saturday and Sunday Collections," and other offerings of the charitable, I was able to place this poor homeless negro on a street car under the care of our janitress, and send him to the Hospital of the Good Samaritan. Before doing so, I injected 20 minims of the solution of hydrobromate of quinia of Andrews & Thomson, under his skin. This contained four grains of quinine, and is considered to be equal to 20 grains taken by the mouth. I did this to make certain that the remedy would reach his circulation. I also had made up for his use a solution of quinine, 20 grains to be taken every 4 hours. At the hospital he was at once undressed and placed in a warm room and a warm bed, was given a good drink of whiskey, had hot bricks applied to his feet and hot bottles to his sides, His clothes were found to be covered with vermin and had to be burned, but this could not be done before the bed and the matron's clothing even were infested. She stuck to her post, however, manfully I was going to say, when

I reflected that some of the greatest feats of heroism, the world has known, have been the deeds of woman. It is to her constant care and nursing that this man owes his recovery. He was utterly helpless and there happened to be at the time no male nurse in the institution. With the assistance of a female attendant therefore she was obliged to attend to all his wants, even to assisting him in meeting the calls of nature, but I am sure you at least will agree with me that she did not thereby in the least degree forfeit that womanly modesty and sense of propriety, which are at once the essence and the glory of true womanhood.

At 10 P. M., the first night I found evidences of reaction in the hot skin and in commencing moisture of the surface. His temperature was now 103⅗°, his pulse 153° and respiration correspondingly frequent. He refused food. He passed a small quantity of albuminous urine. The nurse said he had been very drowsy, and she thought he must have had an opiate, which was not the case, however. The hypodermatic injection of quinine was repeated and the whiskey and milk were continued. The next day his disease assumed a remittent type, the early morning temperature being 101$\frac{1}{10}$, at night 101⅗. His bowels were costive. He passed his urine in bed. His recovery was gradual. He was a little delirious the night of the second day, requiring a dose or two of bromide of potassium. On the 4th day his appetite began to return and his temperature reached normal, but it rose again and continued to vary a degree of two between morning and evening and as convalescence progressed it fell below the normal, which is not an uncommon event in convalescence from febrile diseases. The further treatment consisted in quinine and tonics, sedatives, and laxatives, which were required from time to time. He sat up on the 10th day. On the 7th day the albumen was reduced to $\frac{1}{12}$ and on the 12th day it had disappeared entirely. It was noted also, that he had a ravenous appetite. He left the hospital yesterday, having received a new suit of clothes. He had entirely recovered and was duly grateful for what had been done for him.

You will observe that in the above case confidence was placed mainly on stimulants and quinine. Some have laid great stress upon morphia and chloroform in this affection, but please remember that quinine is the great and indispensable remedy, and give it with a free hand. Of its antidotal or destructive effect upon the malarial virus we are certain. All other remedies are altogether subordinate. A convenient way to give it and one which absolutely insures its effect is hypodermatic injection of the hydrobromate of quinia (Andrews & Thomson's Formula). I have administered this solution a great many times and although it is somewhat painful I have never seen an abscess result from it. A minute quantity of cocaine added to the solution will obviate the painful sensation.

I have thus presented you three complete cases in which the results can be seen, and it were better for the sake of truth and accuracy if this could always be done by clinicians, as nothing so rounds off and completes the diagnosis and history of a case, as, on the one hand, the results of a *post-mortem* examination, and on the other, the presentation of a fully recovered patient.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING APRIL 11, 1888.

The President, J. SOLIS-COHEN, M.D., in the chair.

Dr. J. M. Barton read

A REPORT, AND EXHIBITED THE SPECIMENS, OF SOME CASES OF ABDOMINAL SURGERY.

(*Continued from last issue.*)

Stricture of the ileo-cæcal valve; chronic obstruction of the bowels. Laparotomy; digital dilatation of the stricture; recovery.—Mrs. Ann H., aged

thirty-seven years, a patient of Dr. D. S. Jones, of Plymouth, Pennsylvania, was admitted to the Jefferson Medical College Hospital in May, 1887. She had been in good health until the birth of a child in May, 1886. Since then she had had repeated and increasing attacks of obstruction of the bowels; during which there were entire loss of appetite, obstinate constipation, constant vomiting, great abdominal pain, and tenesmus, similar, she stated, to labor pains. Lately there had appeared at these times a tumor in the lower part of the abdomen about the size of the adult fist; these attacks occurred about once a month, and as they lasted three weeks she had but a short interval of comfort between them. When free from the attack, she stated that the tumor returned to the right iliac fossa, where she thought she could distinguish it by palpation and its tenderness on pressure. I was unable, at this time, however, to recognize any unusual mass in this situation.

I kept her under observation until an attack should occur. On May 21st an attack began, and her sufferings fully verified her statements. The tumor appeared between the umbilicus and the pubes, it was about the size, and very nearly the shape, of the adult kidney.

On May 2, 1887, in the presence of Professors Gross, Parvin, Brinton, and several other physicians, I made a median incision about four inches in length and exposed the mass; it proved to be an intussusception of the ileum into the colon with a thickened and contracted ileo-cæcal valve forming the apex of the intussusceptum.

There were slight adhesions between the contiguous layers of peritoneum covering the bowel, which were readily broken up, and the intussusception reduced.

On examining the ileo-cæcal valve by a finger invaginating a fold of the colon, it was found to be hard and contracted. A longitudinal incision was made in the colon about one inch in length, and three from the valve, through which I passed my finger and found the valve contracted to about the size of a crow's quill (one-fifth of an inch). It was slightly thickened, quite hard, white in color, and did not bleed during the examination or subsequent manipulations. It was considered by all present to be a case of cicatricial stenosis due to some previous inflammatory action, and certainly not malignant. It was dilated, with considerable difficulty, by the introduction of the little finger; the index finger was then carried through its entire length.

The wound in the bowel was closed by a continuous silk suture, including only the mucous membrane; the peritoneal mucous coats were brought in apposition by a continuous silk Lembert suture.

All the operative procedures upon the bowel were performed outside of the abdomen cavity, the abdominal wound being kept closed by sponges. The portion of bowel outside was thoroughly washed and returned, the abdominal wound was closed in the usual manner.

There was some vomiting after the operation, the patient was kept slightly under the influence of morphine for a few days, and on a milk and broth diet. The bowels opened naturally on the eighth day, the stitches were removed on the fifth and sixth days; the temperature never rose above 100°. She returned to her home entirely free from all her previous symptoms, and remained free for several months.

[Her subsequent history appears later in this paper.]

Obstruction of the pylorus. Digital dilatation by Loreta's method; death from exhaustion.—George H., German, aged fifty-eight years; blacksmith. His health had always been good until the last year. At the time he came under my care he had the typical symptoms of complete pyloric obstruction, with a well-marked tumor at the usual situation, it was not very large or hard, had no marked outlines, and presented the characters of pyloric thickening more than those of a malignant growth. The microscopical examination of the matters vomited gave no evidence of malignancy, and no vomiting of blood had occurred. He was greatly emaciated, and so feeble that at first I refused any operative in-

terference; the operation had, however, been explained to him, and its performance promised before he came under my care, and he insisted so strongly on having a chance for prolonging his life that I consented.

The operation was performed at Jefferson Medical College Hospital May 22, 1887, in the presence and with the assistance of Professor Brinton, Dr. Wirgman, and quite a number of others.

As the patient's condition warranted no further interference than mere dilatation of the pyloric orifices, and as the usual incision to the right of the median line would have exposed the stomach nearer to the pyloric orifice (as shown by the position of the tumor) than I desired, I made the incision directly in the median line, and about three inches in length, beginning an inch and a half below the ensiform cartilage.

The stomach was readily exposed three inches from the pylorus. The examination of its exterior threw no new light on the character of the growth, though the stomach at this point was found to be slightly adherent to the structures beneath. An incision, a little over one inch in length and three inches from the pyloric orifice, was made in the stomach, parallel to and directly beneath the abdominal incision, the coats of the stomach were much thickened. Complete stenosis of the pyloric orifice was found when the finger was introduced, this was readily dilated with the little finger, while the tumor was supported outside the abdominal walls with the left hand, the orifice was then further dilated by the index finger.

The thickening and infiltration of the walls of the stomach at the point of incision prevented the use of the Lembert suture, their softened condition evidently required the suture to pass through all the coats. As the abdominal wound was directly over that in the stomach, the latter was closed and brought in contact with the abdominal wound, so that the visceral and parietal peritoneum might adhere, and if any of the contents of the stomach should escape or any pus form, they might readily drain outside and not into the general peritoneal cavity. Fine silk with two needles were used, these were carried from within outward through all the coats of the stomach, one needle through each lip, then crossed, and one brought through each lip of the abdominal wound, a few were carried direct without crossing. These sutures were tied and the abdomen closed.

Nothing was given for the first twenty-four hours by the stomach, the rectal nourishment upon which he had relied previous to the operation being continued. No vomiting occurred during the four days that he lived, on the second day milk and hot water were given in small doses at regular intervals, and as they were well borne they were increased in quantity and frequency. Notwithstanding the fact that he took over a quart of milk per day, besides rectal nourishment, he sank and died exhausted on the fourth day after the operation. There had been no elevation of temperature.

At the autopsy the stomach was found firmly fastened to the abdominal wall, there was no evidence of any peritonitis. In the interior of the stomach it was difficult to find the point at which the incision had been made, the sutures being completely buried in the folds of the mucous membrane. The pyloric thickening was inflammatory in character, and not due to any malignant growth.

There was complete obstruction previous to the operation, there was none after, and had the patient been subjected to operative interference earlier, there is no reason why his life might not have been greatly prolonged.

Two penetrating stab wounds, one puncturing the liver and one the transverse colon. Laparotomy; recovery.—Michael H., aged twenty-five years, was admitted to the Jefferson Medical College Hospital at 3 P. M., of September 9, 1887. About three hours previously he had been stabbed twice with a small and pointed amputating knife, during a quarrel in a house of ill-fame.

There were two wounds, both penetrating the abdominal cavity, both at the outer edge of the right rectus muscle and both running diagonally toward the

median line, and penetrating the peritoneum at that point. The upper was one and a quarter inches long and was just below the edge of the ribs, it terminated in the left lobe of the liver, from it there was free venous bleeding.

The lower wound was three-quarters of an inch long; it was three inches below the upper and just above the level of the umbilicus. After hurried antiseptic preparations, I opened the abdomen in the median line from the ensiform cartilage to the umbilicus, and found an opening about five-eighths of an inch in length in the transverse colon parallel to its length and near its mesenteric attachment; this was closed by the continuous silk Lembert suture. The suture failed to control a small artery in this wound, but a separate stitch carried under it and tied secured it.

The wound in the liver was small, it had ceased oozing, and as its lips were in fair contact no suture was used. The abdomen was cleansed, the wound closed and dressed in the usual manner.

The following morning his temperature was 101° and in the evening 100°; after that, though it kept quite low, varying from 98½° to 99½°, he had a sharp attack of peritonitis, lasting three days, during which time there was constant regurgitation of bloody fluid. The abdomen was painful and greatly distended with gas, requiring the contant use of the long rectal tube to relieve him. The stitches were removed on the fourth and fifth days, and the abdomen supported by adhesive plaster. He was discharged cured on September 29th, having been in the hospital twenty days.

Epithelioma of the ileo-cæcal valve. Resection of three inches of intestine; recovery. — Mrs. H., aged thirty-eight years, the same patient whose ileo-cæcal valve was dilated seven months before (see page), came complaining of a return of her former symptoms, her sufferings were slight, but were evidently of the same character as before the first operation.

November 1, 1887, with the assistance of Drs. Allis, Kendig, Stillwell, and the resident staff, I again opened the abdomen. A straight incision parallel to the median line was made, it was three inches in length terminating at a point one inch outside the middle of Poupart's ligament. The incision was made at this point as the nearest to the portion of bowel I wished to attack, because I feared adhesions might have formed after the last operation, rendering it inaccessible from any distant incision; and, further, if it became necessary to form an artificial anus, it would be a convenient point.

I had decided that if it should prove to be a recontraction of the stricture, to make a longitudinal incision about two inches in length carried through ileum, ileo-cæcal valve and cæcum, bringing the two ends of the wound together and sewing it up transversely; this would best be made on what would be the under surface of the bowel when the patient stands erect. I tried this on the cadaver and found it practicable, and that it increased the circumference of the bowel, at that point, about two inches.

The head of the colon was readily found, there was no return of the intussusception, no adhesions had formed, though in reducing the intestine at the first operation there had been slight bleeding at a number of points where adhesions were torn. The scar of the original intestinal incision was scarcely perceptible. At the ileo-cæcal valve, however, there was now a decided tumor, and it was now evidently epitheliomatous.

An incision was carried into the mass verifying the diagnosis, the entire valve had become an irregular mass of epitheliomatous tissue varying in thickness from a half an inch to an inch, entirely obstructing the gut except an aperture in the centre, about one third of an inch in diameter. The circumference of the valve was less thickened by the disease than the centre.

The abdominal wound was now closed by sponges, leaving the diseased parts outside; three inches of the bowel, including the disease, were removed; no clamps were used, the bowels being held in the hands of an assistant; a few vessels were tied.

As the mortality is very high when the separated ends of the bowel, in these operations, are sewed together and returned, I had decided if it became necessary to excise, to establish a temporary artificial anus and begin at once the proceedings for its cure. With this end in view, immediately after the removal of the diseased bowel and the ligation of the bleeding vessels, one blade of Dupuytren's enterotome was introduced into each portion of the bowel, viz., one into the ileum and one into the colon, the two blades were brought together and the screw run down firmly. A strong ligature was placed on the ends of the bowel, including the enterotome, to prevent the escape of feces during the subsequent manipulations. The bowel was washed, placed in position at the lower angle of the wound and fastened there with a continuous silk suture. The abdominal wound was closed, covered with cheese cloth saturated with mercurial solution, and this in turn with patent lint soaked in sweet oil. This is the best method that I have found to protect abdominal wounds close to an artificial anus.

The heavy ligature around the ends of the bowel was now removed. A ring of cotton soaked in oil placed around the artifical anus, the outer extremity of the enterotome supported by oakum, and a wide bandage pinned over it.

Morphine was used hypodermically during the first forty-eight hours and then discontinued; vomiting occurred during the first two days and then ceased. Some feces appeared on the evening of the operation, and full quantities two days later.

On the eighth day the enterotome was found loose,and was removed; its removal was preceded by a passage of feces from the natural outlet. The stitches were removed on the third and fourth days, and the wound supported by adhesive plaster. After the removal of the clamp the patient was permitted to rise, and all restrictions removed from her diet.

The bowels acted naturally for a few times, when all the feces came again from the artificial anus. The clamp was again applied on the 17th, and came away on the 28th. Its removal was again followed by a few natural passages. As these ceased in a few days the clamp was applied for the third time with a precisely similar result.

As this had proved ineffectual, the method of Mr. Banks, of Liverpool, was used. A strong ligature was fastened to the middle of a heavy piece of rubber gas tubing about six inches in length, one end of the tube was passed into one bowel, the other end of the tube into the other bowel, the middle of the tube pressing against the spur. The position of the bowel in this case was such that the rubber tube was retained with difficulty. After trying it for ten days without success, I substituted the apparatus which I here show, consisting of two pieces of very heavy rubber gas tubing joined together like the letter T. The upper part of the T is about one and a half inches long, and presses directly against the spur; the other tube is three inches long and merely serves to keep the first in position. The large base is circular, is three inches in diameter, and serves as a pad to prevent the escape of feces from the artificial anus. The three pieces of rubber are joined firmly by a strong wire running from the first to the last piece, and twisted tight. This method proved at once satisfactory, and a large proportion of the feces began at once to pass by the natural outlet, and continued to do so. The patient is now in the hospital, but I shall make no attempt to close the fistule until it is seen if the bowels will continue to act naturally.

During this prolonged treatment, fearing that the colon, from disuse, might contract, I directed that she should be given an injection of a quart of water daily, and I was surprised to hear that when a pint had been given it appeared at the artificial anus. By continuing these injections the capacity of the colon was rapidly increased, and when last tried it held three pints; of course, when the bowels began to act naturally this was discontinued.

Correspondence.

THE MEDICAL PRCTICE ACT.

BALTIMORE, Aug. 14th, 1888.

Messrs. Editors of the Journal :

An idea seems to prevail among the medical men of the State, especially those who have been in practice over ten years, and are not affected by the provision of the Act of Assembly, January session of 1888, chap. 429, entitled: "An Act to promote the public health and regulate the practice of medicine in the State of Maryland," that the State Board of Health has been tardy or negligent in performing the part assigned it in connection with the said law. A knowledge of the facts will show that such is not the case. In the first place, the act did not become a law until approved by the Governor, sometime after the adjournment of the Legislature, and no action could conveniently be taken by the Board until the regular quarterly meeting in July, when the matter was duly and carefully considered, with the opinion of the Attorney-General on the constitutionality of the law, &c., before us. This opinion was given in response to a request of the Board made soon after the act became a law.

In the second place, the profession should not lose sight of the fact that there is always a great deal of detail connected with the execution of any law, which must be considered and provided for. In the present instance a certain amount of advertising, proper books of record, blank certificates, &c., must be provided in advance of any attempt to carry out the provisions of the law. The Legislature made no appropriation to cover these necessary expenses; but like the Jewish task-masters who required their bondsmen to "make brick without straw," our law-makers seemed to think the State Board of Health could "run the machine" *without oil.*

In the opinion rendered by Attorney-General Whyte, June 28th 1888, he says: "The failure of the Legislature in furnishing an appropriation for books, certificates, &c., cannot be remedied by the Board, but if the fees received are not large enough to pay these expenses *the law cannot be executed until the Legislature provides the proper material.*"*

In the third place, it is to be noticed that the original draft of the law presented to the Legislature was so amended and emasculated by that body as to render its provisions inoperative and valueless as a public health measure, and its execution by the State Board of Health not only impracticable but farcical. These amendm nts opened wide the door for the escape of that important class of "quacks" whom we most desire to reach with merited nemesis. Every town in the State is systemetically visited by these ignorant pretenders, who defraud the poor and often succeed in extracting large sums from their more prosperous victims. Some of these so-called "doctors" are regular residents and ply their business with more assiduity than benefit to the public. No punishment could be too severe for such impudent and injurious frauds; but should they see fit, as most of them would certainly do, to take advantage of the ten years clause, they would, under the law, go scot-free, while the meritorious young physician, qualified by integrity, intelligence and education, if less than ten years in practice, would be required to secure a certificate, though "native here and to the manner born."

Considering the evils of quackery, it is astonishing how difficult it is to circumvent, or punish it. Legislatures wink at its conspiracy to defraud, and its dupes pocket the injury they receive without ever once thinking they have made fools of themselves. "The man," says the *London Lancet*, "who cannot scrape a few shillings together to pay a doctor's bill, and who will pauperize himself to escape one by going to the nearest dispensary hospital, will soon find a guinea or two to buy a quack medicine; or his friends, who will make no contribution to the payment of the honest doctor, will combine to pay a huge fee to any ignorant pretender, who advertises his ability to do the impossible."

*The books, certificates, &c., must be provided *in advance* of the payment of any fees.

The tendency of the law, which the State Board of Health is called upon to execute, is to protect and encourage the quack in his raid upon human life, while it imposes conditions upon many honest physicians who are competent to minister to the sick.

C. W. Chancellor, M.D.

SMALL HOSPITALS FOR THE TREATMENT AND STUDY OF INSANITY.

Editor Maryland Medical Journal:

I have read with much interest the editorial in the Journal, of last week on the "Modern Treatment of the Insane." The treatment of insanity is a subject to which special attention cannot be too often called, and whether we look at it from a philanthropic or medical standpoint, we must be impressed with the great changes and rapid advances which have in recent years been made in this department of medicine. While you quote from Dr. W. Channing (*Boston Medical and Surgical Journal*) to prove the advances that are being made in the building of asylums and their medical management, I am reminded of the fact that I published one of the first articles on this subject in the *American Journal of Medical Sciences*, January 1885. I find your editorial so in unison with my ideas, that I think it will further your object to call attention to the main points treated therein. In this article I advocated the establishment of small hospitals for the tratment of acute cases of insanity so that diseases of the mind could obtain as prompt and as efficient medical attention as "a fractured leg or a diseased liver might command in any hospital in the country."

In this connection I called attention to the fact that the study of insanity was now claiming the talents of a larger number of students, and that "the division so long existing between insanity and general nervous diseases, is now about to be broken down, and the whole subject included under one head. The line dividing some general nervous troubles from actual insanity is very difficult to establish, and the treatment of the two classes of cases must inevitably come under the care of the same specialist. There is no reason, either on physiological or therapeutical grounds, why the neurologist should not include mental diseases in his study and practice, and the only factor which has prevented this natural division of the subject has been the peculiar organization of insane asylums."

After considering in detail the many disadvantages, of these large institutions, the unwise association of the curable with the chronic cases, the onerous duties of the medical superintendent in regard to the fiscal and household management of his institution, I came to the following conclusion:

"It is thus that I have been led to consider the great good to be accomplished by the establishment of small hospitals for curable cases of insanity, in which the administrative cares would be assumed by an officer appointed for that purpose, and where the medical head of the institution would have only his professional duties to occupy his time. This is the intermediate hospital which is to stand between acute insanity and the asylum. This is the hospital which is to develop the ambition of the specialist, which is to enlarge his horizon, and to bring him out of an asylum into the active world of thought and progress. This is the hospital which is to teach the treatment of insanity as it has not yet been taught, and to educate, under active clinical instruction, the men who are to be the guardians and promoters of a most important reform. The possibility of making a hospital and a school out of what has been heretofore an asylum without educational power, or without the means of using valuable clinical material is a proud future to look forward to. It means much to the profession. It is of deep significance to the public."

I hope that your timely editorial may cause wide notice and comment on this important subject, and you will pardon me for calling your attention to what was done in the same spirit, and in the same direction several years ago.

John Van Bibber, M.D.

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BALTIMORE, AUGUST 25TH, 1888.

Editorial.

ETIOLOGY OF DIPHTHERIA.—In no department of medical *science*, as distinguished from medical *art*, has modern progress been more striking and beneficial than in that which relates to the etiology of disease. It seems but a brief space since the present writer characterized Koch's discovery of the bacillus tuberculosis as marking an epoch, in medical progress. It is common to use that expression and its use upon the occasion in question was criticised and considered a misapplication of terms. But the result has proved that it was justifiable and now we have a whole genus of diseases which can be safely placed under the category of germ diseases. In some of them it is true the germ has not yet been certainly discovered, but the mode of origin as well as analogy, place the question fairly beyond doubt. Diphtheria comes under this heading of "unproved," for although twenty different species of organisms have been discovered in the throat in diphtheria there is no positive evidence that any one of them is the immediate agent in the production of this disease. The greatest claim is made in behalf of a bacillus discovered by Klebs, but although this is said to be capable of producing a false membrane at the site of inoculation in animals, it is not invariably present in diphtheria, it does not produce the membrane when applied to healthy mucous surfaces, it is not followed by paralysis, and it has been discovered in healthy saliva. Turning from the question of a contagium vivum we find that highly interesting and important facts have been educed by other methods of study, as by investigations into the conditions associated with the outbreaks of the disease. One of the most recent and most valuable contributions to this method of investigation is that by Edgar G. Barnes, M. D., Lond., delivered before the East Anglican Branch of the British Medical Association (*Brit. Med. Jl.*, July 28). His studies are based upon 50 outbreaks of the disease occuring in 13 years and embracing 223 cases, 40 of which proved fatal. Forty-nine of these outbreaks occurred in the district of which he is the medical health officer. Admitting the infective character of the disease as established by overwhelming proof, he points out a distinction between it and such infections diseases as small-pox for instance in the fact that it is not traceable to previously existing cases with the same uneering certainty as the latter and its congeners. In but four instances was an outbreak traced to infection from without though careful inquiry was in each case made. In 38 other outbreaks sanitary defects were detected in the houses first affected, viz: in 19 impurity of drinking water, as by contamination from sewage, household refuse, vegetable matter, etc.; in 15 nuisances connected with cesspools; in 10 defects of household drainage; in 11 animals kept in an uncleanly state in close proximity to houses, and in 10 offensive manure accumulations. Striking instances are given illustrating the influence of these different agencies in the production of outbreaks. One, for instance, consisting apparently of only isolated cases, was traced to a school, upon examining the premises of which, an offensive piggery was discovered close under one of the windows, the odor from which was frequently evident in the school. Upon

removal of this the outbreak ceased and no further cases had occurred during a period of ten years. In another, extensive outbreak, the cases were confined to one street where a new drain had been constructed, but the house drains emptying into it had not been trapped. This was done and the outbreak immediately ceased. In 8 outbreaks only were no sanitary defects discoverable, nor previous outbreaks to be traced, from which infection might have been derived. In 28 cases the site of the house where the outbreaks began was found to be damp; in the remaining 22 it was dry. No connection was traced by the author with season, rainfall, disease in domestic animals, or milk infection, all of which have been proven by competent observers to be factors in the causation. School attendance was found to be an active agent in diffusing the disease, and it is an interesting fact that the disease was thus propagated by children, who had been convalescent for as long as a month. The disease was found to prevail in certain districts more than in others; certain localities and certain houses were found to be repeatedly the scene of outbreaks. Further, the disease especially prevailed in thinly populated districts, where the soil was damp and there was no system of drainage to carry off the filth from the proximity of houses. Two maps are placed side by side, showing the contrast in this respect between diphtheria and scarlet fever a typical infectious disease; the latter like other infectious diseases being most prevalent and most fatal in the districts containing the densest population. In this respect therefore diphtheria does not follow the law of infectious diseases, and although more easily spread from one to another in centres of population, this tendency is counteracted by some agency which favors its development in rural districts. The author ventures the opinion "that this disturbing factor is dampness of soil caused by want of suitable systems of drainage, combined with filth in the form of decomposing animal matter." The author also expresses an opinion that the facts given tend to show that the germ flourishes outside the human body under the conditions named, and that diphtheria may arise independently of a previously existing case in the human subject. And whereas in several outbreaks there was a preliminary period of sorethroats, of which undeveloped stage we find no analogy in other specific diseases, the inference to be drawn is that the causative agent is a poison gradually developed by insanitary conditions, rather than a definite specific germ.

The Congress on Tuberculosis.—An important meeting was convened in Paris, on the 25th ulto. of veterinary surgeons, physicians and others engaged in researches connected with tuberculosis. It originated with a veterinary surgeon and appears therefore to have taken a wider range than it would have done had it been limited to physicians alone. There is no doubt that much light may be thrown upon the subject by those whose opportunities enable them to observe and compare the disease in other animals than man, and thus to supplement or complete as it were the knowledge we have gained. The questions discussed were such as the relative susceptibility, the use of flesh and milk from tuberculous animals, the mode of entrance and spread of the virus, diagnosis, heredity, contagion, hygienic and other remedial measures. There was much said about the danger of using tuberculous meat. One speaker estimated the number of tuberculous cows as four in every hundred, and stated that bacilli had been found in profusion in the milk from tuberculous udders. The most radical measures were advocated and whilst the statement that so far not a single case of transmission of the disease by the use of tuberculous meat was on record, remained uncontradicted; indeed some experiments upon cats were adduced which seemed to show that the bacilli die when they enter muscle; yet so strong was the circumstantial evidence and so susceptible the human race to the tubercular virus, that it was

voted that the flesh of all tuberculous animals should be destroyed *in toto*. As the prophylactic virtue of heat does not appear to have been allowed, the inference is to be drawn that cooking does not suffice in suspected cases as in the case of trichinous pork, altough the importance of boiling the milk in hand-fed infants was insisted upon. In this connection attention was drawn to the fact that tuberculosis is almost unknown in the goat. Mr. Cornil related some interesting experiments showing the rapid passage of tubercle bacilli through various healthy mucous membranes, with subsequent generalisation through the system. As showing how thorough and extensive the measures of prophylaxis may be, and are already made, it was stated that in Belgium and France bovine virus is not utilized for vaccination until the heifers from which it is obtained are opened and found to be healthy.

Miscellany.

Anomalies in Medical Life.—The following pithy little paragraph is extracted from the editorial columns of *Gaillard's Medical Journal*, for April, and bears the title, "A Strange Anomaly:"

"The physician is the only man whose life-duty calls upon him to work directly against his own interests. He must study and work to bring about a state of affairs which tends directly to relieve him of his occupation. Every year the physician realizes that it is more scientific to keep a community healthy than to cure it of such ills as it is obliged to suffer from when no regard has been paid to sanitation. As he advances in science he places himself more and more in the position of a merchant who is using every effort to make his wares useless. Fortunately, there is not much prospect of his being entirely successful in this endeavor at present, but it is easy to see that the medicine of the future will be progressively preventive."

There are contrarieties in every walk of human life, but a stranger one than that above described it will be difficult to find. The inevitable tendency of the vast volume of sanitary work, done early and late, by every modern-minded physician is the abridgment of his field of labor and his livelihood, because it manifestly reduces sickness and the medical demands of the community. The more conscientious and thorongh a man is in the discharge of the sanitary phase of his self-appointed duty, the more absolutely does he come in conflict with the material interests of his brethren and himself. Carried to its legitimate conclusion, we behold the singular spectacle of a body of specially trained men seeking, by its own unselfish exertions, to wipe itself out of existence. But let us not cross the bridge untimely: it will not come in our day. We are minded to give a brief illustration of the above, taken from the medical history of Queens County. It is told of old Dr. Isaac Ledyard, a notable character who flourished in Newtown a century or so ago, when there was a frequent passing of the social cup and much drinking of toasts; it is told of him that when a sentiment or toast would be demanded of him, it was his wont to lift his glass and pledge the company in this guise: "Here, my friends, is your very good health, and that is most consumedly against me." If the good old Doctor had survived until the days when sanitary science was discovered, he would have been found acting in like manner, as he phrased his toasts—at odds with his material interests.—*Brooklyn Med. Journal.*

Precautions Taken to Prevent Further Spread of the Yellow Fever. —Fumigation stations are now open at Chattahoochee, Fla., and Du Pont, Ga., in addition to that at Way Cross. These stations are not in immediate connection with the railroad depots, but are some distance down the railroad towards Florida. The one at Chattahoochee is at River Junction, about two miles from Chattahoochee. This station is under the charge of Assistant Surgeon Geddings, of the Marine Hospital Service. The one at Du Pont is at present under

the general direction of Passed Assistant Surgeon Urquhart, whose headquarters are at Way Cross.

These fumigation stations are constructed from "box" cars, which are divided into two compartments by upright planking. In each compartment thus made, wire-netting shelves are placed at regular intervals as thickly as practicable. When articles are to be fumigated they are loosely scattered on the shelves, and subjected to fumes of burning sulphur. Other cars similarly shelved have been provided for the railway mail service, and clerks in that service open the mail-bags, puncture the letters and scatter them upon the wire shelves.

The cars, being movable, can be shifted from place to place, and the passageway between the broad doors gives ample room for the shifting of baggage. Passengers coming North from an infected town must pass a short period of observation in the detention camp near Boulogne. From other towns in Florida they may pass the inspectors, but are not allowed to stop at any southern point by reason of local quarantine regulations.

The refuge camp near Boulogne is under command of Passed Assistant Surgeon Guitéras. Persons from Jacksonville and other infected points falling sick at this camp will be returned to Jacksonville by the first train. It has been supplied with tents and cooking-utensils, and the hardships of detention will be reduced as much as possible. Persons unable to bring rations will be furnished them while undergoing detention, but it is probable that only those able to buy tickets will avail themselves of the camp. Ten days at the camp will be required to enable one to pass the inspectors and come North. The inspectors have been provided with conductors' punches, and they punch and issue to each passenger a ticket showing to what points bound, where from, date, number of pieces of baggage, and the name of the inspector. The traveler must also sign his name to the ticket as a means of identification.

The situation in Florida is calming down, but the panic is still very great. Notwithstanding the death rate in Jacksonville is small, and that it has at no time been great, either at Tampa, Manatee, or Plant City, yet the fears of the people in the adjoining towns are such as to lead them to establish rigid "shot-gun" quarantines in many places.

This panic, in many cases worse than the yellow fever itself, it is hoped to quell by furnishing a complete system of inspection under Government auspices. At the same time, such internal measures of sanitation as seem to be necessary will be resorted to wherever the local forces are inadequate to properly perform the work. At Jacksonville the Duval County Board of Health are doing their utmost to stamp out the disease, and it is hoped that their efforts may be successful. It is too soon to speak with positiveness of the origin of the epidemic, but it is quite probable that the case of McCormick, imported from Plant City, was not the first case at Jacksonville. Rumors of yellow fever at Jacksonville had been prevalent for several weeks. It is now known definitely that the first cases in Tampa last fall were brought by a schooner engaged in smuggling.—*Weekly Abstract of Sanitary Reports, Marine Hospital Service*, Aug. 17, 1888.

Muriate of Ammonia in Myalgia.—In a letter to the *St. Louis Med. and Surg. Jour.*, July, 1888, Dr. Wm. Henry of Harmon, Ills., calls attention to this old but neglected mode of treatment. He says:

"I have for a number of years used nothing but hydrochlorate of ammonia in these cases with almost uniform success. I give it in large doses—20 to 30 grains three or four times a day. The remedy should be kept up for some time after the pain has ceased."

In August, next year, an International Congress for Dermatology and Syphilogy will be held in Paris. It will be presided over by MM. Ricord and Hardy. Communications may be directed to M. Feulard, Hôpital St. Louis, Paris.

Medical Items.

Antipyrin and Sweet Spirits of Nitre should not be brought together in a prescription.

What Latinized name of a European country expresses the modern theory of disease? Germania (germ-mania).

The employment of women as drug clerks wont pan out. A customer recently asked one: "Have you large black nipples?" She fainted.

Professor: "Give the names of the bones of the cranium."
Student: "I've got them all in my head, professor, but I can't give them."

"What a fine protuberant forehead your baby has, Mrs. Brown! Did he get it from his father? "No," replied Mrs. Brown; "he got it from a fall down stairs." Exit doctor.

Little lad to chemist: "Please, sir, gie me a pen'orth'o Epsom salts." As the chemist weighs out the medicine the lad pathetically observes: "Don't give me full weight, sir, as I've to take 'em myself!"—*Chem. and Druggist.*

Tait recommends that in malformations of the genital organs where the sex cannot be determined the individual should be brought up as a male, because less harm will be done if a mistake has been made.

A pint of warm water taken on an empty stomach in the morning, is the safest and surest of all remedies for habitual constipation. It dissolves the fæcal matter and stimulates peristaltic action; thereby giving a normal action without pain. If the tongue is coated, squeeze a lemon in the water and drink without sweetening.—*Texas Health Journal.*

Goodell (*Standard*) treats most cases of puerperal eclampsia, actual or threatened, by injections of chloral hydrate into the bowel, preceded by bleeding if there be plethora. If labor have begun he gives chloroform and delivers, otherwise he interfers only when compelled.

Of the introduction of new remedies Barthlow says: The earliest announcements are not unfrequently given forth by medical *quidnuncs*, who are more enthusiastic than logical, more sensational than exact, and more concerned to advertise their own doings than to give expression to faithful observations.

The deadly coal gas is being utilized in Paris to kill dogs. The vagrant animals are crowded into a closed box into which the gas is forced, and allowed to remain for three or four minutes, which is sufficient for the extinction of all signs of life. It is neater and quicker than drowning.

A South Carolina physician reports to the *Medical Times* a case where a child's head was completely born and then retracted wholly within the vulva, this process being repeated several times, the head going back in the intervals between the pains. The os was found to tightly grasp the neck of the child, and a little manipulation succeeded in effecting delivery.—*Northwestern Lancet.*

The following is perhaps the most thoroughly drastic effect ever produced by a medicine: The doctor bowed courteously to the lady whom he had seen the night before on her debarkation from the ocean steamer, and for whom he had ordered a compound cathartic pill. "What sort of a passage did you have, Madam?" "Perfectly beautiful doctor," replied Madam, "passed two schooners and a sloop."—*Texas Health Journal.*

The syrup of the iodide of iron is well tolerated by the youngest infants; as many drops as the baby has months may be given three times a day up to eight or ten drops a dose. It is well tolerated by the stomach, in which the iodine is freed from the iron and acts as an antifermentative. Besides, experience appears to confirm the theoretical inference that it proves its power as an absorbent in cases of anæmia complicated with glandular enlargements.—Jacobi in *Archives of Pediatrics.*

According to the *Med. Record*, May 26th, 1888, an Italian patient in one of Dr. Shrady's wards in St. Francis Hospital, deliberately chewed a fever thermometer and swallowed the greater part of it before he was made to understand that the instrument was not intended as a medicine. The editor thinks it was lucky he had no subsequent increase of temperature, which would make it necessary to risk another thermometer in that way. But then how could the temperature rise when the thermometer went down?—*Peoria Medical Monthly.*

Dr. R. J. Levis, of Phila., says that in his experience the lives of sufferers with advanced phthisis are rendered more tolerable by a residence in Florida than in any other climate with which he is acquainted. Much of their sufferings is due to bronchial irritation; pneumonic pains and catarrhal annoyances all of which are palliated, whilst pulmonary hemorrhages are less frequent and more moderate. Many conditions mistaken for tuberculosis or preliminary to it are cured by a winter in Florida.—*Record.*

Saccharin is now a commercial article, and not a very expensive one, either. It is not only employed as a medicine, but also as a food, in place of cane sugar. The objection to its insolubility has been overcome by a correspondent of the *Scientific American*, who forms by aid of heat a solution of one drachm of saccharin in one pound of glycerin. The "syrup," as it is called, or glycerite, as it should be designated, can be used to sweeten all kinds of fruits and drinks. As glycerin is of itself a food, we do not see why the new preparation may not come into general use. We would like to hear from any of our readers who try it.—*Meyer Bros., Druggists.*

Original Articles.

A YEAR'S WORK IN ABDOMINAL SURGERY.

BY E. C. DUDLEY, M. D., OF CHICAGO.

The list of seventeen cases which I now report includes all of my work in abdominal surgery in 1887. Eight operations were for the removal of the uterine appendages, seven for the removal of ovarian and parovarian cysts, one for the removal of the uterus through the vagina, and one for the incision and drainage of a pelvic monocyst.

The eight patients from whom the uterine appendages were removed had, in every instance, suffered from recurring pelvic inflammations, which had rendered their lives miserable, for which other means of relief had apparently been exhausted, and for which this operation was a final resort. The results of these operations cannot be as satisfactorily reported now as they might be at a later date.

Cases 2, 8, 14, and 17 have been apparently cured.

Cases 3 and 12 were of nervous, neuralgic patients who had suffered for many years from disorders of nutrition, dyspepsia, dysmenorrhea, pelvic pains referable to the region of the ovaries, particularly the left ovaries, which were prolapsed, and from various other disturbances which go to make up the symptom group of hysteria. These have been improved, but the improvement has been chiefly confined to the relief from pelvic pain and dysmenorrhea. It is too early to predict results relative to the nervous aspects of these two cases.

Case 4 was not materially relieved until after the shortening of the round ligaments for a retroversion, which persisted after the removal of the appendages. I am informed that she is now very materially improved, if not cured. Case 5 has passed from my observation, and results cannot therefore be given.

In case 8, each tube contained not less than four ounces of pus. The ovaries were cystic and enlarged; no adhesions. One tube was brought up into the wound, and its contents drawn off by means of a small trocar, before the ligature was applied. The other was ligatured and removed intact. The tubes were enormously distended, and I think would have burst before long had they not been removed. The peritoneum in the region of the appendages was studded all over with small pearly points, giving evidence of miliary tuberculosis; no ascites. Dr. Frank Billings, upon microscopic examination of the contents of the tubes, found the bacillus tuberculosis. This is contrary to the statement of an English ovariotomist, who declares that tuberculosis does not exist in the tubes. No drainage was used; perhaps drainage might have been desirable on account of the tubercular disease in the peritoneum.

In case 17, only the right ovary and tube were removed, the other being entirely absent—a condition which has been observed in other cases. This woman, however, had borne children, and contrary to rule in such cases, the uterus was entirely symmetrical, the left side having been as perfectly developed as the right. At the left horn of the uterus, where the tube should have joined it, there was a slight protuberance, indicating a very rudimentary tube, and at the point of this protuberance, a little depression could be seen, but whether there was a connection between this depression and the interior of the uterus I did not determine. The ovary and tube which were removed were extremely adherent; the ovary was cirrhotic and had been the seat of pain for years.

Of the seven ovariotomies, four were for ovarian and three for parovarian cysts. They illustrate both the gravity and the simplicity of these operations. The parovarian cysts were easy of removal; the others were adherent and two of them presented difficulties which rendered their removal almost impracticable.

In case 11 the tumor was so intimately adherent throughout its entire surface that I was unable to break up the adhesions in the usual way, but was obliged to split the cyst-wall, leaving what might be called the capsule of the cyst

in the abdomen, stitching it to the abdominal wound. The layers of the cyst-wall were so intimately connected that the greatest difficulty was experienced in separating them. The torn surfaces bled so profusely that I used Mikulicz's drainage, packing the cavity with iodoform gauze, leaving it in for twenty-four hours, and then substituting the drainage tube. After a long, tedious convalescence, the patient was discharged, having a fecal fistula at the lower extremity of the wound. Whether this fistula resulted from some damage done to the intestine in the operation, or from the pressure of the glass drainage tube, or from an ulcerated condition of the lower bowel, which had been recognized previous to the operation, I do not know. She had been a victim of epilepsy, which for a number of months after the operation was in abeyance, but which has now reappeared and of which she will probably die.

In case 6, the adhesions were also very extensive; not less than a square foot of surface was exposed in separating them. After breaking up some very extensive parietal adhesions on the right side, the hemorrhage was quite profuse and from a hundred points, and not controlled by the ordinary isolated ligatures. Hemostasis was finally secured by passing a number of silk sutures, half an inch apart and parallel to one another, deep down beneath the bleeding surfaces, and tying them tightly. This method seems preferable to the actual cautery. It is rapid and effective. The patient did well for three weeks and seemed to be securely convalescent, when she came near dying of septicemia consequent upon several hypodermic sloughs, hypodermics having been given at the time of the operation for an alarming heart failure.

In case 1 a croupous pneumonia developed immediately after the operation, from which the patient narrowly escaped a fatal result.

The vaginal hysterectomy was for sarcoma uteri and has previously been reported to this Society. The patient, I understand, continues in good health.

The case of incision with drainage was unlike anything I had ever seen. The cyst-wall was very thin, was opened directly without invading the abdominal cavity, and so far as I was able to determine, was intimately adherent all around, except perhaps deep down in the pelvis and on its posterior surface. I could feel the ovaries and uterus through the cyst-wall. Lawson Tait describes a variety of abdominal cyst in many respects similar to this.* He reports six cases, all occurring in young women between the ages of sixteen and twenty-six. Before the operation they appeared to be parovarian cysts. Upon opening the abdomen, were found intimate adhesions between the cyst and peritoneum, limpid fluid, cysts lined with epithelium, smooth glistening surface; the uterus and ovaries could be felt through the cyst-wall, were apparently healthy and independent of the cyst. The tumors were therefore neither ovarian nor parovarian. Tait is disposed to refer them to a distinct class of pathological cysts. His impression is that they are formed by dropsical distention of an ovule which had not become impregnated, but which, having dropped into the peritoneal cavity, had there become attached and developed.

An examination of the contents of this cyst gave the following results:

Report of Analysis of fluid from abdominal cyst opened by Dr. Dudley at St. Luke's Hospital, September 26th, 1887.—A sample of the fluid containing about three fluidounces was taken.

Upon inspection the fluid appears clear, translucent, and contained no (macroscopic) sediment. Color, amber; odor, none; reaction, neutral; specific gravity, 1.008.

Chemical examination showed albumin present in large quantity (nitric acid, dilute, and heat test) so that the mixture coagulated into a semi-solid mass.

Another portion diluted four times by distilled water showed, after applying the acid and heat, shaking to break up the coagulum, and allowing to settle for twenty-hours, a precipitate filling one-third the bulk of the mixture.

*"The Pathology and Treatment of Diseases of the Ovaries." Fourth edition, page 184. William Wood & Co.

Applying Francklyn's method of reduction (*Journal American Medical Asso.*, April 4th, 1885), it is found that the original fluid contains about .026 by weight of albumin.

Tests for urea, uric acid, phosphates, and peptones were applied with negative results in each instance.

Microscopical examination of twelve slides revealed no sediment except a few particles of amorphous material (probably extraneous).

H. H. Frothingham.

43d St. and Lake Ave., Oct. 3d. 1887.

Preparatory Treatment.—Unless there was some special indication to the contrary, the preparatory treatment was short and simple, occupying not more than two or three days, as follows: A cathartic about forty-eight hours before the operation; repeated vaginal douches of hot castile soap suds, with thorough cleansing of the external genitalia and of the entire abdominal wall, especially of the umbilicus. One or two general shampoo baths or if practicable a Turkish bath with a lather shampoo of the hair. The hour for operating has been nine o'clock in the morning, a cup of beef-tea having been given two or three hours before. Previous to the day of the operation diet is not restricted or modified.

Antisepsis.—Antiseptic drugs as a rule were not used in direct connection with the operation. They were employed for the purpose of rendering hands, instruments, and patient surgically clean, and then thoroughly washed off with water which has been sterilized by filtering and thrice boiling; that is, antiseptic drugs were not brought in direct contact with the wound. Sponges which had been kept in weak solutions of sulphurous acid, carbolic acid, or corrosive sublimate were never used until these drugs had been thoroughly washed out with sterilized water. Indeed, everything that was to be in direct connection with the operation was treated in this manner. Fumigation of the patient's room has only been done when it had previously been occupied by several cases or by a suspicious case. Sometimes, as a matter of ceremony, a little iodoform was sprinkled over the wound before the dressings were applied, but it smells bad and may do harm by exciting or keeping up nausea.

If in the toilet of the peritoneum there be blood, oozing points, or pus, or if these be even suspected, I wash out the abdomen freely, putting in quarts or gallons of water; and when in doubt whether this should be done, I remove all doubt by doing it.

The same rule applies to drainage. If in doubt, alway drain. I have recently lost a patient whom drainage might have saved. The adhesions were extensive, but the abdomen being perfectly dry, I closed without drainage. She did badly for the first thirty-six hours. I reopened; there had been no hemorrhage, but the abdomen contained an abundance of bright red serum. If this had not been allowed to accumulate at all, the result might have been different.

The glass drainage tube is always preferred. The tubes kept in the shops are too large. I have had some made, of the diameter of lead pencils, having the shape of test tubes, with many small perforations the size of a pin head at the closed end. Two or three of these tubes may be introduced if desired. They do no harm; they can be removed if nothing comes through and the openings immediately close, and they carry off the bloody serum or other fluids as efficiently as tubes of large size. Drainage not only prevents septic infection, but by keeping the abdomen dry serves as a hemostatic, as moisture favors hemorrhage. It is important that the perforations at the end of the drainage tube be quite small, otherwise portions of omentum are apt to work themselves through and make trouble in the removal of the tube. I have recently had two such cases; in one the tube was nearly half full of omentum which had worked its way through an opening only one-tenth of an inch in diameter. This annoyance may be in a measure prevented by giving the tube a turn or two whenever the dressings are opened.

Medication and Diet.—The cases included in this report have recovered with

very little medicine, some without any at all. Opium has been used very exceptionally. A patient who begins to take opium for pain after abdominal section ordinarily continues to have the pain and to require the opium; but if the drug be withheld, the pain generally subsides.

Case 11 strikingly illustrates the advantage of a non-opium treatment. Abdominal tenderness and distention, and other signs of peritonitis appeared soon after the operation; it became essential to relieve the distention by evacuation of the bowels; soap and turpentine enemata were inadequate and the movement was not without difficulty secured by means of calomel and soda, whereupon the peritoni tis subsided. Had the secretion been locked up under the influence of opium, the peritonitis would have probably extended and, I fear, with fatal result.

It is perhaps not too much to say that the modern treatment of peritonitis by catharsis, judiciously employed, is sound. Not less than half of my patients after abdominal section have a cathartic before the end of the third day; the others are usually treated with copious enemata of stiff soap suds in which a teaspoonful of turpentine to the quart has been thoroughly mixed. Upon the least suspicion of distension an action of the bowels should be secured.

During the first twenty-four hours no food whatever is given; only a little hot water, or ginger ale, or possibly champagne. On the second day a little barley water is cautiously given, soon to be followed, if there is no disturbance or nausea, with half-teaspoonful or teaspoonful doses of milk, repeated occasionally and increasing in quantity, as the patient gives evidence of being able to bear it.

(To be continued.)

A Princely Physician.—Prince Louis Ferdinand, of Bavaria, has passed the final medical examination qualifying him to practice as a physician. He is the second member of his family who has joined the medical profession.—*Medical News.*

Selected Articles.

SURGERY OF THE BRAIN AND SPINAL CORD.

BY WILLIAM MACEWEN, M.D.

Mr. President and Gentlemen:—Allow me to thank you for the exceptional honour you have conferred upon me by inviting me to address the British Medical Association on my recent investigations in surgery. It would have been more in harmony with my own feelings to have brought before such a meeting the work of others, but that the form of invitation explicitly precludes. From among the various subjects which have engaged my attention, it would have been difficult for me to have singled out one as especially worthy of notice. Fortunately, I was so far relieved from that decision by receiving a very direct hint from one whose position in the Association demands respect. In obedience to that expressed wish I now venture to address you on the Surgery of the Brain and Spinal Cord, a subject which has been of much interest to me, and which I hope may not prove uninteresting to you. In doing so it is necessary to premise, in the briefest possible form, the history of the evolution of cerebral surgery.

The surgery of the head in the past.—Lesions of the head have at all times held a prominent place in the annals of surgery. Much has been done by surgeons to advance the healing art as applied to this particular region. Their efforts have been, however, chiefly directed to the superfical parts, the skull and its membranes, and were exclusively confined to the results of injury. Their operations were simple, undertaken, for the most part, upon the primitive evidence of direct visual and tactile observation. There is no reference made by them to cerebral surgery as it is now known. The brain, whose function was at that time little understood, inspired fear; it was intimately associated with the seat of life; it was the mysterious dome of thought; it gave lodgment in its recesses to the soul; and was surrounded by all the mysticism which a highly speculative philosophy inculcated.

Although surgeons did not share the popular belief that to touch the brain was to induce certain death, yet they had just grounds for concluding that to them it was practically inviolable. It was no want of boldness or lack of manipulative dexterity, in which indeed they greatly excelled, that determined this reluctance in dealing with brain lesions. Post-mortem examination revealed the fact that many cerebral lesions could have been easily reached had the surgeons only known during life at what particular part they had been situated. There were two formidable barriers to the advance of surgery in this region—first, the fact that the majority of intracranial operations were attended by inflammatory action which so often proved fatal as to cause surgeons to shun active interference; and secondly, the brain was a dark continent in which they could descry neither path nor guide capable of leading them to a particular diseased area, and did they attempt to reach it, it could only be by groping in the dark. Therefore they were constrained to confine their efforts to traumatic lesions, and of these to such as afforded external indications of their presence, and which called out clamantly for relief. From the days of Pott to our own there seemed to be a growing conviction not only of the impotence but of the positive harmfulness of active interference, so that the trephine was regarded as an almost obsolete instrument. Yet surgery was fully abreast of the physiology of the day. Such was the state of cranial surgery till 1870.

Two factors necessary for the introduction of cerebral surgery, and how they were obtained.—However one might wish to extend the sphere of surgery to the brain, it was necessary first to adopt means whereby immunity from the inflammation which so constantly attended brain lesions could be secured; and secondly, to endeavour to gain a better physiological knowledge, in the hope that light might be shed upon the localisation of cerebral lesions. In the wards of the Glasgow Royal Infirmary, Lister had formulated the theory and wrought out the practice of the antiseptic treatment of wounds, and already much had been done to dissipate the fears of surgeons regarding operations practiced on other parts of the body. Experience gained by me showed that not only compound fractures of the skull but large osseous defects in the cranial vault, accompanied by extensive loss of cerebral substance, were quite amenable to treatment, exhibiting no tendency to inflammatory action as long as the tissues were preserved aseptic. When this held true of the rough and often septic lesions produced by machinery accidents, how much surer would well-planned and carefully executed operations be? This conclusion was subsequently amply confirmed by the results of operations undertaken by me for the relief of injury in which the brain had to be exposed, and from which detached portions of it had to be removed. In such instances no inflammatory phenomena interrupted the even course of healing. A striking feature of these wounds of, and operations upon, the brain was the absence of false hernia cerebri, which had hitherto formed such a conspicuous complication of brain lesion in man, and which had so often marred the success of physiological experiments by extending the zone of irritation, and by the fatal results which ensued. It was thus manifest that inflammation arising from exposure of, and operation upon, the cerebrum could be obviated under aseptic conditions. Meanwhile many workers had been sedulously endeavouring to unravel the intricate and complex questions relating to the structure and function of the brain.

Previously the cerebrum was supposed to perform its functions as a whole in the same way as the liver, heart, and kidneys performed theirs, there being no differentiation of function. Broca in 1861, from observations on human pathology, isolated a particular limited area as the seat of the faculty of articulate language. This very important investigation foreshadowed the localisation of function in other cortical centres, for if the existence of a definite function confined to an isolated area were admitted, then the question arose, How many other centres with specialised functions might there be?

Broca's discovery was thoroughly iconoclastic; it shook the notion entertained regarding the unity of brain function to its foundation, it awakened thought and made men explore anew with critical eyes fields which previous investigators were supposed to have exhausted. Dr. Alex. Robertson of Glasgow suggested in 1866 that there were separate sets of fibres for the conveyance of special motor impulses from the cortex. Hughlings Jackson in 1869 stated that there were many limited areas on the brain connected with separate and distinctive functions, founding his opinion not on speculative deductions, but on clinical experience, and on the direct observations of pathological facts. The inception of the idea that there was a portion of the brain whose function was related to motion was treated with extreme scepticism, and the suggestion was likely to have long remained a speculative question had it not been for the advent of another and more direct mode of examination. This new departure consisted in the performance of experiments upon the lower animals by Fritsch and Hitzig, who in 1870 published an account of their observations. They demonstrated the existence of a series of circumscribed areas on the surface of certain of the cerebral convolutions, the electrical stimulation of which caused on the opposite side of the body coördinated movement in distinct groups of muscles. These were momentous facts, destined to revolutionise former ideas of cerebral function. But their full force and significance were not recognized, in this country at least, until Ferrier's observations on the brains of animals, undertaken to put to an experimental proof the views entertained by Hughlings Jackson, were published in 1873. Then the mind of the physiological world was fairly awakened. The suggestion of Hughlings Jackson on the motor cortex became crystallised. Another link in the unity of plan of creation was manifest, as even in the higher and more complex brain of man parts existed whose function found homologous expression in that of the lower animals. Abundant proof has been gathered from human pathology, such as that afforded by the elaborate observations of Charcot and Pitres, to put beyond cavil the broad fact that there are points in the human cortex cerebri intimately related to motor and sensory functions of certain parts of the body. The apportionment of definite areas and their precise delimitation is still the subject of investigation.

Many interpretations have been put on these facts. Some hold that the central convolutions are distinctly motor in function, some that they are sensory, others that they are both motor and sensory, and still others believe that the excitable regions of the cortex are but points of departure and not foci of production of motor reactions. These views, interesting in themselves, cannot be discussed here; it is enough for our present purpose to recognise that there are certain regions of the brain in intimate relation with the movement and sensation of certain parts of the body, and which in the presence of either irritative or destructive lesions give rise to phenomena which are of the greatest diagnostic value.

The initial history of cerebral surgery.—This extended physiological knowledge enabled cerebral lesions to be more accurately localised, whilst my experience showed that by preserving aseptic the parts operated on surgical interference with the brain would be robbed of its chief danger.

1. *Case in which the symptoms of focal cerebral disease led to diagnosis of lesion in Broca's lobe.*—While in possession of this knowledge a case of cerebral abscess presented itself to me in July, 1876. The general symptoms of this affection were clearly manifest. A cicatrix on the forehead marked the site of an injury, under which the skull was bare. Had this cicatrix been taken as a guide to localisation of the abscess and an operation performed there, no abscess would have been found. But other phenomena were exhibited which enabled its seat to be definitely recognised. A convulsion, accompanied by loss of consciousness, commenced on the right side, and gradually involved the whole body. On its cessation, absolute hemi-

plegia of the right side was present and remained for two hours, during which the patient was aphasic. Both these phenomena became much less marked at the end of this period. From these symptoms the abscess was diagnosed to be situated in the immediate vicinity of Broca's lobe. It was evident that the whole of the base of the left third frontal was not involved in a destructive lesion, otherwise the aphasia would have persisted for a much longer period, and it was probable that Broca's area had become involved in the inflammatory zone surrounding the abscess. Trusting to these localising symptoms, it was proposed to open the abscess aseptically by exposing Broca's lobe. Unfortunately, the result of a consultation was decidedly to negative this proposal. The parents then refused consent, notwithstanding the assumption by myself of the sole responsibility of advising and performing the operation. Thirty-six hours afterwards the convulsions returned and persisted until a fatal issue ensued. After death the friends acquiesced in the proposal to have the operation performed just as it would have been had permission to do so been granted during life. The skull was trephined, the brain exposed, and an instrument was introduced through the third frontal convolution for half an inch, when pus flowed through the incision, proving the accuracy of the diagnosis, and giving poignancy to the regret that the operation had not been permitted during life. The abscess, about the size of a pigeon's egg, was situated in the white matter of the bases of the second and third frontal convolutions. The blade of the bistoury, which had been left *in situ* after insertion through the trephine opening, was found to have penetrated its outer wall. The congested zone in the periphery of the abscess extended from the anterior horn of the lateral ventricle to the cortex of the base of the second, but especially that of the third left frontal convolutions. Here the precise spot in the brain which the abscess occupied was accurately determined from the localising phenomena induced by the focal lesion, which were trusted as indicating its position, though pointing to a different part of the brain from that which would have been selected had the seat of injury been accepted as a guide. The operation showed how easily the pus could have been evacuated, though the unfortunate refusal to allow it to take place during life leaves uncertain the ultimate issue, but, judging from my subsequent experience, worse cases have recovered after operation.

2. *Case in which motor phenomena were the sole guides to the cerebral lesion.* —In 1879 a case with definitely localising motor symptoms was seen by me, occurring in a boy, who had had a fall six days previously, which occasioned some light bruising about the face and head, accompanied by a shade of mental obscuration. At the termination of forty-eight hours he was so well that his parents could with difficulty be dissuaded from allowing him to rise from bed. On the sixth day he had a series of convulsions, the twitchings beginning in the left side of the face, gradually involving the left arm, and subsequently the left leg, during which consciousness was preserved. Paresis of the parts remained, though sensation was unimpaired. On the following day there was a renewal of the convulsions, the parts being affected in the same order, but the convulsions persisted, and finally became general with loss of consciousness. The motor phenomena indicated a lesion on the right side of the brain, pronounced at the lower portion of the ascending convolutions, as the face and arm centres were the first to show evidence of stimulation. The lesion was evidently of an irritative nature, such as might be occasioned by a spiculum of bone driven into the brain, or by a degree of pressure exercised on its surface. It was clearly not destructive, such as might be occasioned by severe cerebral contusion. Dr. Alex. Robertson was asked to see the case, and agreed with me that the motor symptoms presented a sufficiently clear guide to the localisation of the lesion in the lower part of the ascending convolutions. It was therefore resolved to expose that portion of the brain. As a preliminary, the head was shaven, when a scarcely perceptible irregularity was detected in

the cranial vault near the coronal suture. When the skull was exposed, a fissure was discovered running across the coronal suture. Trephining was performed at a point slightly behind the auriculo-bregmatic line, and midway between the external auditory meatus and the vertex. This point happened to correspond to the posterior extremity of the fissured fracture. There was no blood between the dura mater and the skull, but the dura had a very black colour. This membrane was opened, and gave vent to two ounces of fluid and coagulated blood, contained in the subdural cavity. The operation was conducted aseptically, and the patient made an uninterrupted typical afebric recovery. There was no recurrence of the fits, the paralysis of the left arm soon disappeared, and he is living now, and in perfect health.

3. *Case in which the symptoms exhibited pointed to lesion in the frontal lobe.*—In 1879 an idiopathic case came under observation, in which the totality of the symptoms indicated a lesion in the left frontal lobe of the brain. It occurred in a patient the subject of a small tumor above the left eyeball in the orbital cavity. A tumour had previously been removed by me from that position, and it had now recurred. Other symptoms had, however, meanwhile presented themselves. The left pupil was in a state of stabile myosis; there was obscuration of the intelligence, slowness of comprehension, want of mental vigor, and pain in the head. These pointed to the probability of a lesion in the left frontal lobe, but were not sufficient to permit a diagnosis to be made. The patient was therefore placed under the observation of an educated and skilled nurse. Some weeks later a series of convulsions occurred, the initial stages of which were carefully recorded by the nurse, without which the key to the brain lesion, as indicated by the convulsions, would have been lost, as, when seen by me, they had become general, and threatened speedy dissolution. The convulsions were at the outset strictly confined to the right side, commencing in the face and arm, and confined to these two parts during the initial attacks; the leg on the same side was affected during the third seizure, and ultimately the convulsion became general, with complete loss of consciousness. These phenomena were construed as indicating extension of the irritation to the lower and middle portions of the ascending convolution; and when this was considered along with the former evidence, it was concluded that an irritative lesion existed in the left frontal lobe. On these grounds it was resolved to trephine midway between the centre of the ascending convolutions and the anterior aspect of the cranium. At this point a minute nodule the size of a barley grain was detected on the outside of the skull. A large trephine was applied, a disc of bone removed, and a tumour of the dura mater, which was exercising pressure on the brain, was exposed. It was half an inch in thickness at this point, gradually becoming much thinner and spreading all over the anterior two-thirds of the frontal lobe. The tumour was, after a prolonged operation, carefully dissected out, along with the brain membranes, where they were involved in the neoplasm. The patient rapidly recovered, was restored to perfect health, and subsequently was able to gain her own livelihood. She lived for eight years afterwards, ultimately becoming affected with chronic Bright's disease, from which she died. The skull and brain were examined, and there was no trace of further tumour growth. This case was published in 1879. A paper by me illustrating some points in the localisation of cerebral affections and the advantages of antiseptic trephining, published in 1881, concludes: "When the skull can be opened, the cerebral coverings incised, and the brain exposed without fear of inflammatory mischief, trephining ought to be employed when the localisation of the lesion is established, and further, besides operating in traumatic cases, trephining is justifiable in idiopathic cases."

4. *Cerebral abscess in temporo-sphenoidal lobe; involvement of motor area; operation; death.*—In 1881 a very large cerebral abscess, located in the temporo-sphenoidal lobe, but involving the bases of the third frontal and ascending convolutions, came under notice, but at

such a late period of the disease that before arrangements could be made for the operation the patient suddenly exhibited all the phenomena of the abscess having burst into the lateral ventricles. Prior to this, aphasia could be discerned through the clouded state of the patient's intelligence; there was paralysis of the left third nerve and of the brachial and facial muscles on the right side. From these the extent and localisation of the disease were determined. Nothwithstanding the fact that the patient was *in extremis* the operation was performed. The membranes were congested, and the abscess was reached on penetrating a quarter of an inch of the cerebral surface. After several ounces of pus had been evacuated, something like a tennis ball was seen floating in a sea of pus which still remained in the interior of the brain. This proved to be an old encysted abscess, in the periphery of which an acute abscess had developed, which had destroyed the whole of the temporo-sphenoidal lobe. The patient, though greatly relieved, died from exhaustion. It was seen at the post-mortem that the whole temporo-sphenoidal lobe had disappeared, and the bases of the second and third frontal as well as the bases of the two ascending convolutions were the seat of acute encephalitis.

5. *Intra-cranial effusion of blood diagnosed from motor symptoms alone.*—There are three other cases, which occurred in 1883, to which brief reference may be made, as two of them have already been published. In May of that year a traumatic intra-cranial effusion of blood was correctly diagnosed from the motor symptoms exhibited as being located over the base of the ascending convolutions. There were no external marks of injury, and the motor symptoms alone were the guides to the position of the lesion. The patient is now alive, in robust health, and regularly at work.

6. *Syphilitic tumour in paracentral lobule diagnosed from motor symptoms alone.**—In the following month (June, 1883) a case of brachio-crural monoplegia without loss of sensation was relieved by the removal of a syphilitic tumour from the paracentral lobule, and a plastic effusion from the centre of the ascending convolutions. Within a week the patient had recovered the power of the lower limb, and within a month was able to walk and perform her household duties. She has continued since in fair health, and can walk long distances, though with hemiplegic gait, a certain amount of structural contraction having occurred prior to the operation.

7. *Focal lesion in ascending convolutions recognised from motor symptoms alone.*—A few months later, in 1883, a brachial monoplegia was correctly diagnosed, a focal lesion being found in the white substance of the motor cortex of the middle portion of the ascending convolutions. The lesion was an extravasation of blood into the brain, around which encephalitis had occurred, inducing irritation and compression of this area. The relief given was immediate and complete. The patient has since been in perfect health, and regularly at work.

With the relation of these seven cases, all of which occurred prior to the end of 1883, the initial history of the movement ceases to be solely personal. In December, 1884, Dr. Bennett and Mr. Godlee, assisted by Dr. Ferrier, had the first case operated on in London in which a tumour was removed by Mr. Godlee from the brain.

Reference may now be made to a few points regarding the present aspects of cerebral surgery.—First, are the localising motor phenomena reliable guides to the diagnosis of cerebral lesions, situated in the motor cortex? My answer is unhesitatingly affirmative. Each case, however, requires to be studied on its own merits, the whole phenomena presented, the *unobtrusive* as well as the prominent features must be carefully searched for, the degree in which each is present must be accurately measured, and the whole weighed and compared with former experience before drawing a conclusion. The various points upon which reliance is to be placed should be

*Case shown at Pathological and Clinical Society, Glasgow, January 24th, 1884; afterwards printed in the Glasgow Medical Journal.

tested, wherever possible, by instruments of precision, instead of the rough impressions conveyed by the hand being trusted. In testing the power of the muscles in brachial paresis, the dynamometer will impart much more accurate information than that which can be gained through the sense of touch, and occasionally shades of difference may be determined by it which otherwise would remain undetected. In many cases the evidences of focal lesions are so distinct that a diagnosis is easy; in others they are so intricate that a prolonged and minute investigation is necessary to decipher them; while there are still others in which the signs are so perplexing that at best an approximation only can be arrived at. To lay bare a certain known convolution in a cerebral surface and observe the result of its stimulation is an easier task than to take what appears to be a tangled skein of nerve phenomena, such as is presented by many lesions of the complex brain of man, and to relegate each to its true source, and infer from a study of the whole what particular parts of the brain are affected.

8. *Epilepsy* (*Jacksonian*) *induced by focal facio-lingual lesion; removal of cyst from brain; cured.*—In support of the foregoing, the following instances are adduced, and a case is first presented in which the symptoms were so definite and precise that the diagnosis was easy and permitted me to perform the operation on first seeing the patient. He was twenty-two years of age, and suffered from epileptiform convulsions, each lasting from two to three minutes, and as they occurred on an average every five minutes, he consequently had over 100 in twenty-four hours. The convulsions were limited to the tongue, the right facial muscles and the platysma on the same side. When they subsided the parts remained paralysed. Consciousness was retained throughout. Eight years previously he received an injury to the head, after which his right arm became weak, the weakness persisting though he was quite able to work. It was clear that an irritating focal lesion existed, confined to the base of the ascending convolutions, causing a Jacksonian epilepsy. The only question was, whether the base of the ascending parietal was involved as well as that of the ascending frontal. The contraction of the platysma on the opposite side has been asserted to be induced by stimulation of the base of the ascending parietal. Dr. Whitelocke reminded me, however, that the platysma is often supplied by a branch of the facial, so that a single lesion in the base of the ascending frontal would be sufficient to account for the whole phenomena. The operation was at once undertaken, when in the lower part of the ascending frontal, a cyst about the size of a filbert was found situated partly in the cortical and partly in the white substance of the brain, and was surrounded by a narrow zone of encephalitis. In manipulating the medullary substance, in process of removal of the cyst, the patient while under chloroform had a convulsion, confined to the same group of muscles as were affected in his fits prior to the operation. The convulsion ceased with the removal of the cyst, and he has never since had another. The wound healed firmly under one dressing, the paralysis of the facial muscles soon disappeared, and he has since been constantly at work. The power of the right arm has also been increased. Possibly the cyst might have caused indirectly slight pressure on, or set up an inhibitory action of, the middle portion of the ascending frontal.

This case affords important evidence of the position occupied by the facio-lingual centre in man, and on the whole corroborates that assigned to it by experiments on the lower animals. It was also interesting to note, when the part of the brain was exposed and irritated, that it gave rise to the same kind of convulsion.

(*To be continued.*)

Infant Mortality. — The Italian statistician, Signor Bodie, has published some figures showing that ten per cent. of all infants in Europe die within the first month, twenty per cent. before the end of the first year, and thirty-three per cent. of the remainder during the first five years. Hardly seven children out of ten reach the completion of their sixth year.—*Record.*

Correspondence.

LETTER FROM LONDON.

London, July 24th, 1888.

Messrs. Editors of the Journal:

Dear Sirs :—Nothing but the promise, extracted from me, that I would write to you while in Europe, would induce me to take one moment of my time from the many things in this city, which so much educate the mind, cultivate the taste, and delight the imagination. London is so big with history, literature, theaters, museums and shops, that even a doctor would "throw physic to the dogs," for the pleasures that surround him.

The Etruria brought me in six days, four hours, and twenty-five minutes, across the Atlantic. The ocean was as smooth as the Chesapeake Bay. No fogs, no rain, no one sick. A rest of one day at Liverpool, where I saw Dr. Wm. Alexander, who kindly arranged a round ligament operation for my benefit—a tour to the quaint old city of Chester—Leamington, Kenilworth and Warwick Castles, and Stratford on Avon, the birthplace, home and burial place of the great Shakespeare; with a night spent at the cozy little "Red Horse Inn," made famous by Washington Irving in his Sketch Book, brought me in three days to London. Here I spent a week most pleasantly, partaking of the hospitality and witnessing the operations of some of London's most distinguished physicians. Among them no one is more distinguished than Dr. G. G. Bantock, for his great skill in laparotomy, and for his unbounded hospitality, especially to American physicians. I have been to London some six or seven times and never without being elegantly entertained at his house, and this time he gave to me and Mrs. Wilson the handsomest private dinner I ever sat down to.

Sir Spencer Wells, Dr. Priestly, and Dr. Graily Hewitt will sail for America on the 28th of August, on the Germanic, three days before I sail on the Umbria. They will go to the meeting of the American Gynecological Society in Washington, on the 18th of September; and the two former have promised to spend a day or two with me in Baltimore. I hope to have the pleasure of introducing them to the medical profession of our city. On the 6th of August, after I return from the Continent, I shall go to Glasgow to the meeting of the British Medical Association, which promises to be large, and have the presence of many distinguished men. Most of the leading medical men I have seen in London, have told me they would be there, and some of the most prominent men in Paris, and we shall no doubt "have a feast of reason and a flow of soul."

Our distinguished countryman, Dr. Fordyce Barker, called on me today, looking well and as full of life and energy as ever. He returns home on the Germanic the 28th of August, and will be at the Washington meeting of the American Gynecological Society.

Dr. J. J. Chisolm is traveling with me. He is the same generous hearted fellow abroad, as he is at home, getting an *eye* into every thing as he goes along. We leave together for Paris tomorrow, whence you shall hear from me again.

Faithfully yours,

H. P. C. Wilson.

LETTER FROM PARIS.

Paris, August 2d, 1888.

Messrs. Editors of the Journal:

Dear Sirs :—My sojourn in Paris has been most pleasant and profitable. Surrounded by many charming American friends, who share my pleasure, in visiting the numerous and varied places of interest here, I have had nothing but enjoyment since I reached this most attractive of all cities. So much to see, so much to do, with two such good fellows as Dr. Chisolm, of Baltimore, and Dr. Parker, of Charleston, my constant vade mecums. For a reasonable time every day, they looked after the eye, while I investigated electricity in uterine fibroids and the other forms of surgery of the pelvis.

The morning after I arrived I received a note from Dr. Apostoli inviting me to call at his house at two o'clock, and go with him to his clinic. I accepted, and was richly repaid. His is a private

clinic. He occupies a flat at No.19 Rue de Jour, embracing a number of rooms. One is a reception room for patients, one is fitted up with beds for those, whom it is necessary to keep quiet for a longer or shorter time, after electrical operations, and one is his operating room. He pays all the expenses of this clinic from his own pocket, and receives not one sue in return,—nurses, assistants, house rent, medicines, &c.,—all for the love of that specialty, over which he is so enthusiastic, and from which he has developed so much, in the hitherto chaotic mass of uncertainties.

He gives his electricity in as fixed doses, as we give our quinine, and never without accurate measurement. He gives it to different parts and of different character (positive or negative) to obtain different and accurate results, and these are as much, or more, under his control as any drug which we administer by the mouth.

I shall never forget his kindness to me while attending his clinics, and in many other ways while in Paris.

In every case he gave me his diagnosis, insisted on my examining the patient for myself, and explained in every instance why he used the Faradic or Galvanic current, why he used one electrode or another, and why he applied to a given part the positive or negative pole.

The history of patients when coming under treatment was shown to me—their present condition was seen by me—their testimony in their own cases was heard by me, and I go away from Paris convinced that Dr. Apostoli is doing a great work in developing the therapeutical power of electricity in curing, or relieving, many of the heretofore intractable diseases of the uterus, and its surroundings.

I saw him puncture fibroid tumors, ber vaginam, with impunity, and thus send the galvanic current into them, up to 250 milliampères. I saw him check profuse uterine hemorrhage, with two applications of the positive electrode into the cavity of the uterus and I saw him do many other things—too much for my time, or your space, but of which I will tell you on returning home. Yesterday he gave me a handsome déjeurner and afterwards took me to Gaiffé's and assisted me in selecting electrical instruments for my own use. Here we parted, with the hope that he would give me an opportunity in Baltimore to return to him some of that kindness which he has shown to me.

To Dr. J. Amédée Doléris, I am also greatly indebted for his kindness to me while in Paris. Dr. Doléris is Surgeon Obstetrician to the Hospitals of Paris. He has a private Hospital for gynecological cases. Here are to be found patients with all the special diseases of women; some remain in the Hospital for operations, and some visit the clinic from day to day. He lectures and gives instructions here to doctors and students, who are anxious to acquire knowledge in this department of medicine. This is the only place of the kind in Paris.

Let me remark here, that there is not in France a medical school which has a professor of Gynecology, nor is there in the whole country a special hospital for the diseases of women.

The women of France will sooner or later learn that it is safer to visit other countries for the diseases peculiar to their sex.

Dr. Doléris called at my hotel the second morning after my arrival at 8 A. M., and took me to his private hospital, where he showed me many cases of interest. I saw him do a laparotomy for hemato-salpinx. He operates remarkably well, sponges little, but cleanses the abdominal cavity by thoroughly washing out with warm water. He closes the abdominal opening with silk worm gut.

I saw him curette the uterus for fungous granulations. The woman was on her back. A bivalved speculum introduced, the anterior lip of the uterus was seized with vulsellum forceps, and pulled down to the vulva. The uterine cavity was afterwards washed out with warm water.

From here Dr. Doléris took me to the Maternity Hospital, and from there to the St. Louis Hospital, where he introduced me to Dr. Péan. I saw him do three operations. One for removing a large

sarcoma from the thigh, one for removal of a varicose tumor from the right labium of a child, about three months old, the other for umbilical hernia, the size of my double fist, in an infant six hours old. Chloroform was given in all these cases, and I have never seen any other anæsthetic used in England or France. The six-hour-old child was apparently dead once or twice, but Dr. Péan kept his assistant expanding and contracting the chest, by working both arms, near the shoulder, and he went through the operation successfully. Dr. Péan invited me to stay in Paris for another week to see him do a vaginal hysterectomy, for a fibroid tumor of the uterus. I was obliged to decline on account of my promise to be at the meeting of the British Medical Association in Glasgow.

I may remark here that I have not seen Sims' speculum used once since here, nor have I seen a woman placed for examination, in Sims' left lateral position. They are all placed on their back, have no drawers on, and their clothes raised from under them and up to the navel. No sheet thrown over them. This impresses an American gynecologist, where a woman's modesty is so scrupulously protected..

From St. Louis Hospital Dr. Doléris took me to his house, where he and his most hospitable wife dispenesd to me an elegant déjeurner. I part with him with much regret.

If I can find time to scribble more, you shall hear from me at Glasgow.

Faithfully yours,

H. P. C. Wilson.

SOME POINTS IN THE ETIOLOGY, ETC., OF TYPHOID FEVER.

Messrs. Editors of the Journal:

Dear Sirs:—As typhoid fever is prevailing to some extent at present, I do not think a few words on the subject would be out of place. I will preface my remarks by a quotation from Watson's lecture on malaria, wherein he says: "I hope to prove to you in a future part of the course that neither animal nor vegetable decomposition is sufficient to generate fever of any kind." I do not deny that this fever might be conveyed through polluted milk or water, but I have never seen a case contracted in that way. I have been studying the disease under consideration for some years, and have come to the conclusion that it is due to the drying of exposed earth in hot weather, and is always of malarial origin, beginning as an intermittent and in sandy soils remains such; but in clay soils, if unchecked, it quickly changes into a remittent first and then into a typhoid.

Typhoid is essentially a country fever, villages being its favorite abode, for in them there is more exposed earth near dwellings than can be found anywhere else. Nearly every house has a garden adjoining and every street has earth exposed to rain and sunshine throughout its whole extent. Villages are built for the most part along turnpikes and in order to prevent the rattling of vehicles earth is thrown on the streets, and this is the chief source of fever poison in them as it dries so rapidly with stone underlying it. The first source of danger might be removed by forbidding the cultivation of gardens within the corporate limits and the second by covering the streets with lime-stone to the depth of three or four inches. This would become smooth and do away with the necessity for dirt upon our rough flint pikes.

I am familiar with a number of country residences that have been visited by fever every time certain fields near them have been planted in corn—the only crop that leaves the ground bare during the hot months. Gardens near them often have the same effect on health.

When called to see a case of fever, I always feel the abdomen carefully and if I find the tenderness confined to the upper part, I feel pretty sure of being able to break up the disease, for when located in that region alone the disease is generally in its intermittent or remittent stage, and can be subdued by calomel and kept in subjection by quinine.

If the patient flinches on pressing the right-flank I conclude that the disease has passed into the third stage, that of typhoid, and that there is very little chance of aborting it.

In every case of typhoid fever I think Salol should be used in two and a half grain doses, three times daily, not only to keep the bowels in an aseptic condition, but also to keep off the rheumatic pains which so often accompany this malady. I would like to write at some length on this subject but think long articles unsuitable for medical journals.

Yours truly,

EDWARD ANDERSON.

Rockville, Md., Aug., 20th.

PUBLICATIONS RECEIVED.

28th Annual Announcement of Bellevue Hospital Medical College. 1888—1889. *N. Y.* Pmpht.

Camp Hygiene. Published by Penna. State Board of Health. Addressed to Medical officers of the National Guard of Penna. Harrisburg, 1888. Pmpht.

U. S. Consular Report, No. 33, 34, 36, 37, 38, 40, 1888. Pmpht.

Annual Report of Department for the Insane of the Penna. Hospital. Phila. 1888. Pmpht.

Bennett Medical College, 21st Annual Announcement. Chicago 1888. Pmpht.

7th Annual Announcement of College of Physicians and Surgeons. Chicago, 1888. Pmpht.

7th Annual Announcement of N. Y. Post-Graduate Medical School and Hospital. N. Y., 1888. Pmpht.

Beaumont Hospital Medical College of St. Louis. Annual Announcement, 1888—1889. Pmpht.

Rectal Insufflation of Hydrogen Gas, an Infallible Test of the Diagnosis of Visceral Injury of the Gastro-Intestinal Canal in Penetrating Wounds of the Abdomen. By N. Senn, M.D. Chicago, 1888. Pmpht. Reprint.

Announcement of Gross Medical College of Denver, 1888. Pmpht.

Comparative Studies of Mammalian Blood, with Special Reference to the Microscopical Diagnosis of Blood Stains in Criminal Cases. By Henry F. Formad, B.M., M.D. Phila., 1888. 8 vo. cloth. Pp. 61.

The National Formulary of Unofficinal Preparations. By Authority of the American Pharmaceutical Association. 1888. 8 vo. cloth. Pp. 176.

Footprints of a Profession or Ethics in Materials and Methods.. Address before Maine Dental Society, by Horatio C. Merriam, D.M, D. 2d. Ed. St. Louis. Pmpht. 1888.

Preliminary Announcement of Annual Meeting of Southern Surgical and Gynecological Association, to be held at Birmingham, Ala., Sept. 11, 12, 13, 1888. Pmpht.

Antipyrine. By Benj. Marshall, M. D., San Francisco. Reprint. Pmpht.

Report for the Year, 1887–8. Presented by the Board of Managers of the Observatory of Yale University to the President and Fellows. Pmpht.

CONSTRICTION OF THE PENIS BY AN IRON RING.—Dr. D. W. Lynch of West Bend, Wis. reports the follow ing case: "On July 12, 1888, a boy, twelve years of age, worked an iron nut 1 inch square, ½ inch thick, with a calibre of $\frac{9}{16}$ inch, on his copulative organ to its root. To his great consternation he was unable to remove it from its position and his father's and mother's efforts also failed to dislodge it. He applied at my office six hours afterward for relief. The distal end of the organ was swollen three times its natural size. I sent for a blacksmith immediately, who came armed with a powerful lever shears and some files. The boy was laid upon the floor, the blacksmith gripped the nut between the blades of the shears, and with repeated efforts in a few minutes succeeded in cutting the nut at one point, when it instantly broke at right angles and flew off. The œdema soon subsided and left no injury.—*Record.*

MARYLAND MEDICAL JOURNAL

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BALTIMORE, SEPTEMBER 1ST, 1888.

Editorial.

HINTS ON THE USE OF THE THERMOMETER.—The importance of correct observations in the use of the thermometer for clinical purposes has not been sufficiently impressed. How many published observations of body temperature in disease are unreliable cannot, of course, be known, but there are ample grounds for the belief that much of the experience upon the subject is worse than useless, it is misleading. There are three points in connection with clinical thermometry that may be alluded to, as deserving the first consideration.

These are :

1. Selection of an instrument. There can be no guarantee of the accuracy of an instrument unless it has been tested and corrected ; hence this should be an indispensable condition of its purchase.

2. Choice of a site where the observations are taken.

As there is a variation in the temperature of the various situations which are accessible to us, it is in the highest degree desirable that there should be uniformity in this respect. There are many reasons, both of convenience and safety, which should lead us to prefer the axilla. But it is not always possible to select this or any other situation and hence the records should always be accompanied by information where they were made.

3. The time needed for observations.

There is no doubt that impatience of physicians and the exactions of practice lead them to hurry through this portion of their work, and thus to devote insufficient time to its accomplishment. Not less than *five* minutes should be allowed for the registration of the temperature and ten would be a safer limit; indeed some have insisted on the latter period. The above and other interesting questions connected with Clinical Thermometry are treated in a full and instructive manner in the last issue. We would call attention to the ingenious way suggested at the close for rapidly taking temperature in hospitals or where a number of persons are to be examined together.

SAVING OF THE PERINÆUM.—Dr. Lusk has placed himself upon record (*Am. Jl. Obstet.*, Aug., 1888) as holding that laceration of the perinæum during labor is, with a healthy vulva, never inevitable but *always* to be avoided. He lays great stress upon a slow descent of the head. By preventing the head from coming out quickly the parts will slowly dilate and relaxation is gradually accomplished. This accords with the writer's experience. Cases of rupture occur mostly in primiparæ and quite commonly as the result of the use of forceps. It is in this class of patients that there is the greatest temptation and the greatest stress brought to bear upon physicians to resort to instrumental aid. The result is very often a tear of the imperfectly relaxed tissues. The impatience then of physicians in first labors is to be deprecated. It may be brilliant and it certainly will enhance the Doctor's reputation and the gratitude of the patient who is experiencing for the first time the terrible throes of childbirth, to be able to give her quick relief, but the practice often comes under the head of "meddlesome midwifery." It is astonishing how much stretching the perinæum will bear. It seems sometimes as though the attenuated tissues would certainly yield the next moment before the enormous pressure of the on-coming head, but wait a little and it passes without injury

to the soft parts. The old-fashioned support of the perinæum which is so much decried by modern obstetricians may be of use, then, in two ways; 1, by delaying the descent of the head, permitting the more thorough stretching and relaxation of the issues, 2, by keeping the occiput well against the symphisis pubis and away as much as possible from the point of danger.

Dr. Macewen on The Surgery of the Brain and Spinal Cord.—We hardly feel that any apology is needed for occupying so much of our space in reproducing from the English journals Dr. Macewen's address before the British Medical Association. He is unquestionably the greatest living authority on the subjects of which he treats, as he is also one of the greatest living surgeons. As the pioneer in this newly occupied field, it seems to us that the interests of our readers will be best subserved and their wishes more certainly met by giving this highly originial address than by placing before them some second-rate article upon some familiar and perhaps threadbare subject. The *British Medical Journal* pronounces this address as "in many respects the most remarkable contribution to surgical literature which the present day has produced;" and again "it marks an epoch in surgery, the initial stage of a branch of our art obviously destined to a glorious and beneficent future." It obviously therefore deserves at our hands a careful and thoughtful study.

We regret that it is somewhat marred by our inability to produce the diagrams accompanying the original.

Miscellany.

Cholera Infantum.—Dr. Louis Starr, Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, in a communication to the *Medical Standard*, July, 1888, says:

The large and frequent watery evacuations characteristic of this disease are such a drain upon the system that it is of the first consequence to replace the waste by food and drink and at the same time check it by appropriate treatment. The irritability of the stomach is a formidable barrier to alimentation, nevertheless every effort must be made to give food in small quantities and at short intervals. Should the infant be at the breast, it may be allowed to nurse for a few minutes every half-hour or hour. If hand-fed, it may be given the foods suitable in entero-colitis or in chronic vomiting, in such quantities as can be retained and at intervals corresponding in frequency to the smallness of the amount. Bits of ice and water should be allowed freely, even though they be rejected as soon as swallowed.

To check the diarrhœa, opium and astringents are necessary. A very serviceable formula is the following:

℞ Liquor morphinæ sulphat. f℥i
Acid. sulphurici aromat. ♏xxiv
Elix. curacoæ . f℥iv
Aquæ . . q. s. ad f℥iii

M. Sig. One teaspoonful every two hours for a child six months old.

With this, two drops of laudanum, suspended in two teaspoonfuls of starch-water, should be given by the rectum every three hours. Two or three times daily a mustard plaster, one part of mustard to five of flour, must be applied over the whole surface of the abdomen, long enough to redden the skin, and the whole body should be sponged several times a day, with water at a temperature of 95° F.

The clothing, diapers, and person must be kept perfectly clean, the sick-room must be as large and airy as can be commanded, and the infant must lie upon a bed and not be constantly nursed on the lap. If it is possible, the patient should be sent early to the seashore or country, as this affords by far the best chance for recovery. Failing in this, morning and evening airings in a coach, or daily steamboat excursions, must be resorted to.

Stimulants are needed from the first, to ward off prostration—from five to ten drops of whiskey in a teaspoonful of lime-water may be given every two or three hours at the age of six months.

When collapse sets in, the quantity of alcohol must be increased, and, if the stomach can bear it, a combination of stimulants is useful, as:

℞ Spir. frumenti . . f℥iv
Ammon. carbonatis gr. xxiv
Syr. acaciæ . . f ℥ i
Aq. menthæ pip. q. s. ad f ℥ iii
M. Sig. One teaspoonful p. r. n.

The temperature must be maintained by hot flannel wraps and hot water-bottles, and the child be kept in a horizontal position and disturbed as little as may be. In this stage, astringents are still indicated, but opium must be used with great caution, or even discontinued entirely, when there are cerebral symptoms and semi-coma.

In the fortunate instances in which this plan is successful, it is still necessary to treat the succeeding diarrhœa, and to build up the general health by good food, tonics, and fresh air.—*Medical and Surgical Reporter.*

Tumor of the Right Ovary in a Child of Seven; Operation; Recovery.—At the meeting of the Clinical Society of London, April 27, Mr. R Clement Lucas read a paper on a case of tumor of the right ovary in a child of seven, associated with precocious puberty. The patient was admitted into the Evelina Hospital in December, 1884, for a tumor of the abdomen, and the mother had noticed some time before, that the child at times had a dark blood-stained vaginal discharge. Other signs of puberty were also present—viz., firm breasts as large as oranges, and a mons veneris covered with hair an inch in length. The tumor was firm and slightly tubulated. This extended from the right iliac region to within two fingers' breadth of the left anterior superior spine, and from the pubes upwards to one inch above the umbilicus. The child menstruated while under observation on the 7th, and again on the 25th of January, 1885. Mr. Lucas performed ovariotomy on February 4th, 1885. The tumor was a solid round-celled sarcoma. The child menstruated again on February 6th, two days after the operation, but from this time it ceased. The signs of puberty also gradually receded, the breasts again becoming flat. The child made an excellent recovery, and when seen two years and nine months after the operation, was in perfect health, and showed no signs of recurrence.—*Lancet and International Journal of Med. and Antisep.*

Laparotomy for Gun-Shot Wound; Death in Fifty-Three Hours from Pericarditis.—*Prof. Roswell Park*, of Buffalo, was called to operate upon a man, aged 32, who had been shot through the body. The wound of entrance was just below the margin of the liver and that of exit at a corresponding point on the left side a little nearer the back. Four hours after injury the patient had recovered sufficiently from shock when an incision was made in the median line and two perforations were found in the small intestine, and a long rent along the mesenteric border. These were closed with Lembert continued sutures of fine silk. The abdomen was closed with numerous silver sutures, the wounds irrigated and drained with small rubber tubes and an antiseptic dressing applied. Patient did well till next evening when pulse and temperature rose and he died comatose fifty-three hours after injury. Before death a very loud pericardial friction murmur was heard. At the partial autopsy the wounds were perfectly united, no leakage, the long wound in abdomen was healed by first intention, there was no hemorrhage, and only slight local peritonitis, chest not examined.—*Medical News.*

Resection of Intestine for Intussusception.—Dr. Vasilieff describes in the *Chirurg. Vestnik* the case of a convict, aged 25, who was seized with abominal pain and vomiting. Laparotomy was performed in the prison hospital at Warsaw. A swelling was soon dectected in the right hypogastrium, when the hand of the operator was passed into the abdominal cavity. This swelling was drawn forwards, and found to be an advanced invagination of the ileum into the colon; there was a very long mesocæcum. The

invaginated small instestine could not be reduced, so an elastic ligature was tied around the gut in two places, and the ileum and mesentery were divided. Then the invaginated ileum was readily extricated and about seventeen inches were resected. The abdominal cavity was well washed out with a solution of sublimate, and the cut ends of the gut were fixed by sutures to the abdominal wound. Much gas and fæcal material escaped when the ligatures were untied. At the third week the patient had an attack of hypostatic pneumonia, bnt recovered. At the sixth week Dr. Vasilieff did an operation for the cure of the artificial anus. About six inches more of the intestine were resected, and the cut ends united by Czerny's suture. On the third day a motion was passed, but on the fifth fæces were found in the dressings. Three attempts to close the fæcal fistula by suture failed. Digital exploration showed that a spur or valve was beginning to form. To this spur a pressure-forceps was applied; it fell off on the third day. Ultimately the fistula was completely cured.—*Br. Med. Jl.*

What Medical Men Said of Anæsthetics Forty Years Ago.—Commenting on the reports of the first use of ether as an anæsthetic in surgery, the Philadelphia *Medical Examiner* expressed the views of the conservatives in the following terms: "We are persuaded that the surgeons of Philadelphia will not be seduced from the high professional path of duty into the quagmire of quackery by this will-o'the-wisp. . . . We cannot close these remarks without again expressing our deep mortification and regret that the eminent men who have so long adorned the profession in Boston should have consented for a moment to set so bad an example to their younger brothers, as we conceive them to have done in this instance. If such things are to be sanctioned by the profession, there is little need of reform conventions, or any other efforts to elevate the professional character; physicians and quacks will soon constitute one fraternity."

Use of Anæsthetics.—While professional opinion is not yet sufficiently crystallized for dogmatic assertion, yet it is quite well established that ether is badly borne at both extremes of life (since it is apt to set up a bronchitis, or to intensify one already present) and by chronic drunkards; and that it is very fatal in cases of fatty heart and of nephritis. Chloroform, on the other hand, is well borne by the young and the old, by pregnant and parturient women; and it is not known to have any irritating effect upon the kidneys. It is almost universally recommended in tracheotomy. Deaths from chloroform generally have been among adults. Deaths have occurred during the administration of chloroform, where there was reason to believe that fear of the anæsthetic was the cause of the fatal result.

In the present state of our knowledge, the use of chloroform for the production of anæsthesia is justifiable during labor, in persons suffering from acute or chronic disease of the kidneys, in tracheotomy cases, and in the young and old, especially when they are suffering from bronchitis. Ether should not be given to persons suffering from diseased kidkeys.—*Med. and Surg. Reporter.*

Spinal Manifestations of Gonorrhœa.—M. Hayem and M. Parmentier have lately contributed an article to the "Revue de médecine," an abstract of which appears in the "Gazette hebdomadaire de mèdecine et de chirurgie," in which they describe certain affections of the spinal cord as directly due to gonorrhœa. The authors have endeavored to extend the range of certain observations made by preceding writers in France and England, and to add to their precision. It seems that in a few persons suffering with gonorrhœa such spinal phenomena are met with as a zone of pain, fulgurant pains in the lower limbs, double sciatica, hyperæsthesia, exaggeration of the patellar reflex, epileptoid trepidation, enfeebled motility, and atrophy of the muscles of the legs and thighs. Ordinarily these phenomena appear in company with articular affections, and, with them, show periods of exacerbation

and of amelioration. The time of their onset seems to bear no definite relation to that of the beginning of the gonorrhœa. They may be grouped in three classes: disorders of sensibility, those of motility, and those of both sensibility and motility. The manifestations are always confined to the lower limbs, and the spinal lesion is generally a congestion or a meningo-myelitis affecting the posterior or the postero-lateral columns of the cord.—*N. Y. Med. Jour.*

Vigier's Coryza Powder.—This remedy, which is greatly prized and often prescribed by French physicians, has the following formula, as given by M. Vigier himself (in the *Gazette Hebdom. de Méd. et Chirurg.*): Finely powered starch, boracic acid, tincture of Siam benzoin, of each equal parts. To be used as a snuff, frequently and plentifully. We would remark here that powered gum benzoin should not be used in lieu of the tincture, as is frequently done by American pharmacists in preparing snuff powders. When the gum is used, the resulting powder is tenacious, packs easily, and is difficult to draw into the nostrils. The same may be said of camphor. It is far better to use the tincture and allow the alcohol to evaporate, as in this manner a granular powder is obtained which has not the vice above referred to.—*National Druggist. Amer. Druggist.*

Contraindictions and Dangers of Antipyrin.—Eloy calls attention to the unpleasant and sometimes dangerous effects of antipyrin, which he has collated from existing literature. Nausea, vomiting, and gastro-intestinal disorders may result from the use of the drug. Syncope has occurred, and Bentzeff believes that the drug always causes this tendency. The opinions of Moncorvo and Dujardin-Beaumetz are quoted to show that the drug modifies the secretion of urine, and it is said that it closes or shuts up the kidneys. Barr has recently recorded a case of collapse and death following the administration of from gr. 15 to 30 in two doses. In one case of puerperal fever the drug caused a fall of more than 2.5°C., with vomiting and diarrhœa. Rigors then came on, the extremities became livid, and the patient died in syncope in thirty-two hours. An autopsy showed the spleen contracted, the kidneys shrunken and containing infarcts. [It appears, however, that Eloy has not made out his case against antipyrin. In the case of puerperal fever there is no evidence against the drug from the report of the autopsy. It is not fair to attribute every and any unfavorable turn in a case to the use of the drug last administered.]—*Revue Gen. de Clin. et de Therap.*

Appointed Associate Professor.—Dr. George T. Kemp, of Baltimore, whose father was a prominent physician of this city, has been appointed associate in bacteriology and physiology in the Hoagland Laboratory in Brooklyn, N. Y. Dr. Kemp received his entire education in Baltimore, going through the grammar school, spending four years at the City College, taking his A. B. degree at Johns Hopkins University in two years, and Ph. D. degree three years after in 1886, holding a fellowship the last year. This laboratory was founded by C. N. Hoagland, a millionaire of Brooklyn, for experimental research in bacteriology, physiology and pathology.—*Baltimore Sun.*

A Large Dose of Croton Oil.—Not long since I was waiting on a man who had malarial fever complicated with a troublesome diarrhœa, which was readily controlled with camphorated Dover's powders, and as soon as they stopped (like the Dutchman) he wanted them to be moving again, and decided to take a dose of castor oil by the family. Consequently, he took a tablespoonful of it, and in less than five minutes he was seized with violent purging and vomiting which alarmed them, and the bottle was examined more carefully and found to contain an irritating liniment composed of equal parts of olive and croton oil. This is the largest dose of croton I ever heard of being taken, and yet it did not prove fatal.—*Dr. Owen in Med. Brief.*

Medical Items.

What is the difference between a lamp and a doctor? One burns the oil, the other oils the burn.

A scheme is on foot for the amalgamation of the three Dublin Medical Schools which promises to become a success at an early day.

The Fothergill prize of the Medical Society of London has been awarded to Dr. Hobart A. Hare of Philadelphia.

A college of medicine for Chinese students was opened at Hong Kong October 1st. The curriculum of the New School is the same as that followed in England.

Young wife.—John, mother says she wants to be cremated.

Young husband.—Tell her if she'll get on her things I'll take her down this morning.—*Exchange.*

In antipyrine we have a remedy that relieves the pain in rheumatism better than salicylic acid, salicylates or salol, as it is also better to reduce temperature and reflex nervous disturbance.—*Prof. J. Sharp, Kansas City Med. Index.*

The Lettsomian Lectures of the Medical Society of London will be delivered next year by Dr. Gowers, F.R.S., who will take for his subject, "Diseases of the Nervous System due to, or related to, Syphilis."

Lawson Tait takes as his assistants three physicians, charging them each one hundred dollars a month, during which time they assist at all his operations and become familiar with his treatment.—*N. E. Med. Monthly.*

A truss for straightening crooked noses is among the novelties in orthopedics. A mask of leather was at first devised for this purpose but Mr. W. J. Walsam has lately (*The Lancet*) invented a felt skull-cap to which an apparatus is attached that produces any degree of lateral pressure on the deformed organ.

The newly established British Laryngological and Rhinological Society is not an unqualified success. I already hear rumors of an intention to conduct it in the interests of a clique, and I understand that several members have resigned, and that many others are likely to follow their example.—*London Letter.*

The Mississippi Valley Medical Association meets at St. Louis September 11, 12, 13. The programme thus far arranged includes many papers and discussions of importance. The first day will be taken up with the discussion of abdominal surgery. The second, with infant feeding and some obstetric subjects. The third day will be given to volunteer papers and some neurological subjects. The society cordially invites all members of the profession to be present.

In the treatment of cholera infantum, Dr. Willard Parker Beach insists on the following points:

1. The administration of foods digested by the stomach absolutely.
2. That the child be kept away from the warm body of the mother, however much it may cry, and be allowed to lie on a hard surface in absolute quiet.
3. Rectal nourishment.—*N. Y. Med. Jour.*

Dr. Nasmyth has been engaged in a physical, chemical, and biological inquiry into the sanitary condition of the air of coal-mines. The following is his general summary of results: The air of coal-mines is fairly good, and compares favourably with air of one-room houses, schools and workshops. Miners are not unhealthy, and are not particularly affected by phthisis or bronchitis; and those statements are supported by statistics given in report showing the mortality for a series of years in a mining district.—*British Medical Journal.*

The British Medical Journal noticing a work on Cancer of the Uterus, by John Williams, M.D., F R.C.P., Professor of Midwifery in University College, London, says: Doctrines about the serious or fatal effects of lacerations of the cervix and erosion of the cervical mucous membrane are refuted by scientific evidence. Dr. Williams is, indeed, opposed to any theory of local mechanical irritation as a cause of uterine cancer. Prolapsed uteri are often exposed to every possible irritating influence, discharges, friction of clothes, external violence and damage from ill-placed or worn-out pessaries, yet in some hundred cases of cancer of the uterus which the author has seen, there was but one in which the organ was procident.

During the Winter Session of 1887-1888, over three hundred and thirty-five different physicians attended the courses of instruction of the New York Post Graduate Medical School and Hospital, 226 East 20th Street N. Y. City. An increase of more than sixty per cent. over last year. In the Hospital Department, about four hundred operations were performed all of major importance. To all of these Matriculates had access, as the Hospital is used solely as a means of clinical instruction. This remarkable increase in the matriculation list has necessitated both larger clinical space and hospital accommodations, so that a new clinical amphitheatre has been erected and will be used for the first time at the opening of the Winter Session, September 17th, 1888. A new and commodious laboratory has been erected and furnished with the latest apparatus for the study of normal and pathological tissues. The nose and throat clinical room has also been enlarged. Professors Abraham Jacobi, Robert F. Weir, Joseph E. Winters, L. Bolton Bangs, and Peter A. Callan, have been appointed to the Faculty. The Session of 1888–1889 promises to be the most prosperous ever held.

Original Articles.

A YEAR'S WORK IN ABDOMINAL SURGERY.

BY E. C. DUDLEY, M. D., OF CHICAGO.

(*Continued from page* 344.)

The Staffordshire Knot.—Three years ago I saw Mr. Tait apply the Staffordshire knot. In the first case, after my return, I attempted to apply it and the patient died of hemorrhage. The next year I saw Mr. Tait operate fifteen or twenty times, and particularly observed his method of applying this knot, and since then have used it invariably, and consider it, generally speaking, the best ligature. A distinguished surgeon in New York has lost a number of patients from hemorrhage with the Staffordshire knot and has discarded it as dangerous. Indeed, a number of operators have had most unpleasant experiences in its use.

The secret of Mr. Tait's success lies in a single maneuvre. After the pedicle has been transfixed, the loop drawn through and brought over to the point of transfixion, and placed between the two free ends of the ligature, these latter are held firmly between the thumb and finger of the left hand close to the point of transfixion. Then with the right hand he catches each free end separately and draws the ligature perfectly tight, and while the thumb and finger of the left hand still hold the thread at the point of transfixion to prevent the ligature from slackening again, the operator, with his right hand, aided by the assistant, makes a hard knot.

An additional precaution to prevent the ligature from slipping may be wisely observed by transfixing at two points, first forcing the loop through at the juncture of the Fallopian tube and uterus in a direction of the operator, then carrying it along on the further side of the broad ligament, and drawing it through again in the direction of the operator, transfixing at the hilum of the ovary. The loop may then be drawn over the tube and ovary and that portion of the broad ligament which it includes, and tied as already described. This modification of the Staffordshire knot which, I am informed, Mr. Tait also occasionally employs, makes hemostasis doubly certain, and is to be preferred on this account.

A word about the silk. The great annoyance which every operator has experienced in breaking a thread at a critical moment, while attempting to apply a firm ligature, is sufficient proof that the silk ordinarily sold by instrument makers is generally inferior and often worthless. A variety of twisted silk, known as "Chinese Grass," may be found at the fishing-tackle shops. For surgical purposes it is unexceptionable, inasmuch as it has the qualities of absolute purity and great strength.

The arrest of menstruation.—One of the chief objects in the removal of the uterine appendages, in a great majority of cases, is to arrest menstruation; in other words, if menstruation be not arrested, the operation in very many cases fails. In the early history of the operation the ovaries alone were removed, or the ovaries and a part of the tubes. It was found in some cases that menstruation continued as before or increased. Then the tubes began to be removed also, and the complete arrest of menstruation was more frequent. It was further found that if the tubes were removed entire, close to the uterus, menstruation was almost always arrested, and that in many cases which were thought to be exceptions, the tubes in reality had not been entirely removed. Oftentimes a small knuckle of tube was discovered to have been left, and to be so closely adherent to the uterus that it escaped notice. The removal of this knuckle has been known to arrest menstruation. Reasoning from these facts, it was concluded that the tubes really have more to do with menstruation than the ovaries.

Contrary to this idea, Dr. Arthur Johnston, of Danville, Kentucky in a conversation with me several months ago, said that the true explanation of these facts might involve an entirely different conclusion. There is a little plexus of nerves in the broad ligament, in the angle formed by the

uterus and Fallopian tube. When the tube is entirely removed, this plexus of nerves is entirely removed also, and on this account it may be that menstruation ceases, rather than on account of the removal of the tubes.

If this be true, it is a fact of immense value. Possibly a ganglion may be found in this region, and it may follow that the removal of this plexus alone, without reference to the ovaries and tubes, may arrest menstruation. This specimen from Case 2 illustrates the plexus of nerves, which is easily recognized by the naked eye.

The incision.—The opening into the abdomen has in most instances been short. Surprising as it may seem, it is sometimes easier to perform difficult manipulations in the abdomen through a small opening than through a large one. The large opening permits the intestines and omentum to rise up in the way of the operator, and to render inaccessible the field of operation. With the small incision, a soft sponge or two will keep the intestines entirely out of the way, and, although the field of operation may not be as easily drawn up to the incision, the small abdominal wound can be easily forced down to the field of operation. This is even true of large ovarian cysts with extensive adhesions. After the removal of the fluid, the lax abdominal wall permits the opening to be moved about to almost any part of the cavity. In many instances the short incision enables the operator to do his work with the minimum amount of operating, and for obvious reasons, therefore, with the minimum risk.

It is well, in closing the abdominal wound, to tie the sutures with bow knots, leaving the ends long, in order to obviate the necessity of introducing new sutures, in case it becomes desirable, at any time, to reopen the wound.

General Remarks.—It has so happened that in almost all of these cases there has been a steam radiator under the window before which the operations were done, the patient's feet being toward the window. This insured a constant warmth of the feet during the operation, and perhaps has in some degree contributed to the freedom from shock.

In removing the appendages, the toilet of the peritoneum may be much facilitated by forcing a soft sponge down into the cul-de-sac of Douglas as soon as a tube and ovary is drawn up into the wound to be ligatured; two or three sponges may be required. If there is much oozing, they may be frequently changed. By this means the blood is immediately taken up by the sponges, and when these are removed the peritoneum is dry. Otherwise blood would find its away into the cul-de-sac and form a clot which might escape notice.

I have not brought the specimens, with the single exception of Case 2, because there is not very much of interest in the ordinary specimen. Every one presents specimens in abdominal surgery, and it has, therefore, ceased to be a luxury to look at them unless they are very remarkable.

Selected Articles.

SURGERY OF THE BRAIN AND SPINAL CORD.

BY WILLIAM MACEWEN, M.D.

(*Continued from page* 350)

9. *Protospasm of the hallux, preceded by sensory impressions and followed by paralysis.*—In another instance a very definite protospasm, accompanied by a sensory impression, gave the key to the localisation. It occurred in a girl aged seven, the subject of frequently recurring attacks of severe epileptiform seizures, followed by paralysis of the affected parts. At the onset of these attacks the patient first experienced in the great toe of the right foot a painful sensation, of such severity as to cause her to scream out. Shortly afterwards, that toe was firmly extended in tonic spasm, which lasted about five minutes. Sometimes this ended the attack. More frequently it was followed by clonic contractions of the muscles of the right foot, leg, and thigh, where the convulsions often terminated. Occasionally they ex-

tended to the muscles of the trunk, then to those of the right side of the face and right arm, the contractions ceasing in the order of accession; rarely did they involve the opposite side, and when they did the patient lost consciousness. Though there was motor paralysis in the affected parts, the cutaneous sensibility remained unimpaired. From the great number of fits which the patient had, following each other in rapid succession, occurring in parts affected with paresis, the result of former attacks, while cutaneous sensibility remained unimpaired, and from the limited area affected, it was concluded that the lesion was cortical. The sensory impression in the hallux, followed by tonic and then clonic contraction of the same part extending to the lower limb, pointed to the upper region of the ascending convolutions as the area of irritation. From the general condition of the patient and family history the lesion was probably tubercular, and, if so, might be multiple. During operation the upper portion of the ascending convolutions was exposed and, with the exception of a few tubercular nodules the size of barley grains adhering to the vessels over the upper part of the ascending frontal, there was nothing visible on the surface. On careful palpation of the ascending convolutions there was found in the upper part of the ascending parietal a circumscribed nodule buried in the brain substance, which on exposure by cutting through the grey matter was seen to be a tubercular tumour about the size of a hazel nut, which was easily shelled out. As an immediate result there was prolonged trepidation of an erratic kind, affecting the muscles of the right side of the body, but especially those of the arm and leg. These were continuous for fully a week, thereafter gradually subsiding. There have been no fits for over a year, and the girl is now in excellent health. The marked sensory impressions which the lesion produced supports Dr. Gowers' opinion, that the parts in the so-called motor area subserve a sensory as well as a motor function. The localisation of the movements of the hallux in the upper part of the ascending frontal has not been borne out by this case (unless the minute barley grain tubercular nodules attached to the vessels in the pia mater could account for the stimulation), the tumour being found in the upper part of the ascending parietal, but the whole lesion could be included in the ring which Beevor and Horsley place on the upper portion of the ascending convolutions.

Other instances.—A brachial monoparesis, accompanied by sensory impressions confined to the same parts, has already been alluded to, in which though the centre of both ascending convolutions was involved, yet the chief lesion was confined to the ascending parietal, and implicated both its medullary and cortical substance.

10. *Brachio crural monoplegia; cyst removal from brain.*—In another case, occurring in a boy of three years, a brachio-crural monoplegia with late rigidity was present, the result of a traumatism received eight months previously. This case was kindly sent me by my colleague, Dr. Dunlop. In it a large thick walled, subdural cyst, containing clear fluid, was found pressing upon the motor convolutions, and a spiculum of bone detached from the inner table of the skull was seen to have penetrated the brain. These were removed and the bone was placed in normal position. The patient made an uninterrupted recovery. The paralysis with the contraction of the muscles passed off to a great extent. He could neither walk nor stand before the operation. Now he can run about and use his hand well, though there is still a paresis in both. With these data from my own experience, as well as from cases reported by Messrs. Godlee, Horsley, and many others, it is clear that the motor and sensory phenomena form reliable guides to localisation of lesions in the central convolutions.

Diagnosis of cerebral lesions in non-motor regions may be made from sensory phenomena.—The following instance shows this, and is also an example of the difficulty in finding the exact clue to the lesion, and how easily it may be overlooked.

11. *Psychical blindness the guide to a hidden lesion in angular gyrus; interesting medico-legal aspects; removal; recovery.*—A man who had received an

injury a year previously suffered from deep melancholy, strong homicidal impulses relieved by paroxysms of pain in the head of indefinite seat. Though the pain was excruciating he welcomed it, as it temporarily dispelled the almost irresistible impulse to kill his wife, children, or other people. Prior to receiving this injury he was perfectly free from impulses of this kind, and had led a happy life with his family. Behind the angular process of the frontal there was a slight osseous depression, which could not account for his symptoms. There were no motor phenomena, but on minute inquiry it was discovered that immediately after the accident, and for about two weeks subsequently, he had suffered from psychical blindness. Physically he could see, but what he saw conveyed no impression to his mind. An object presented itself before him which he could not make out, but when this object emitted sounds of the human voice he at once recognised it to be a man who was one of his fellow-workers. By eyesight he could not tell how many fingers he held up, when he placed his own hand before his face, though by the exercise of his volition in the act, and by other sensations, he was cognisant of the number. He had been in the habit of reading the New Testament, and when he had so far recovered from his injury, he wished to resume his reading. He knew where the book lay near his bed, and could put his hand on it in the dark. One day he stretched out his hand, took the book, recognising it through the sense of touch by its smooth leather covers and the deeply indented letters on its back; he opened it, saw what he considered must be the letters, and the blocking of them into divisions for the words; but they were unknown symbols to him, they conveyed no impression of their meaning, the memory of their signs was gone, it was a sealed book to him. These phenomena, however, gave the key to the hidden lesion in his brain. On operation, the angular gyrus was exposed, and it was found that a portion of the internal table of the skull had been detached from the outer, and had exercised pressure on the posterior portion of the supra-marginal convolution, while a corner of it had penetrated and lay embedded in the anterior portion of the angular gyrus. The bone was removed from the brain and reimplanted in proper position, after which he became greatly relieved in his mental state, though still excitable. He has made no further allusion to his homicidal tendencies, which previously were obtrusive, and is now at work. Such cases of complete mental blindness are rare, and the definite localisation in this case will assist in indicating in man what function the anterior portion of the angular gyrus and posterior portion of the supra-marginal convolution subserve.

Other instances have been related above. One where a combination of symptoms pointed to a lesion in the frontal lobe, and acting upon which a tumour was found pressing upon that area of the brain, from which it was successfully removed; in the other a lesion was definitely recognised from the localising symptoms as seated in the immediate vicinity of Broca's lobe. But even in such areas as the temporo-sphenoidal lobe, where destructive lesions may exist without localising symptoms, one may occasionally, by a process of exclusion, definitely localise the lesion as seated in that part.

12. *Lesion definitely localised as existing in the temporo-sphenoidal lobe.*—A patient exhibiting symptoms of cerebral abscess had, on the left side, ptosis, stabile mydriasis, paresis of all the ocular muscles with the exception of the external rectus, without external squint. On the right side, paralysis of the facial muscles, which retained power of emotional expression to a slight degree and power to close the right eyelid by an effort of will, though it remained partially opened during sleep. He had, also, paresis of the right arm, which, during the few hours he was under observation before operation, had amounted to distinct paralysis. The leg remained normal. There was no diminution of cutaneous sensibility. 1. From these symptoms, it was concluded that a single lesion must be large which could affect at

once the third nerve in its course and the lower half of the ascending convolutions. 2. It was clear that it was not a destructive lesion of large size in the motor area, or the crural centre would probably have been involved, thus causing absolute hemiplegia. The same observation applies with greater force to the crus cerebri, which must be excluded, as the effects of pressure would probably have led to more extensive involvement, and, had the pressure even indirectly affected this area from without inwards, it would have implicated the parts in the reverse order—the leg first, the face last. The tentorium cerebelli would prevent pressure downwards on the pons. 3. The internal capsule could not be the seat of a large lesion, otherwise hemiplegia with destruction of "Charcot's crossway" would have resulted. 4. Though the whole trunk of the third nerve was involved, paresis was alone produced, probably resulting from a degree of pressure. 5. The lesion was gradually implicating the motor area, from below upwards, and was probably occasioned by pressure and its consequences. The only place where a lesion could be situated producing all these phenomena, just to that precise degree, was the temporo-sphenoidal lobe. It was cut down upon, and in the medullary substance of the temporo-sphenoidal lobe an abscess containing three ounces of pus was found, which was evacuated, when the whole of the above symptoms vanished. Three weeks afterwards the wound was looked at for the first time, and found healed.

Can the motor area be removed in large pieces with immunity from serious consequences?—If this region be of such psychical importance to movement and destructive cortical lesions in it are followed by secondary degeneration of the motor tracts, then excision of these areas will necessarily induce permanent paralysis, late rigidity, and ultimate structural contracture. The removal of large wedges from the brain, especially in the motor centre, will produce serious effects upon the brain as a whole, causing during cicatrisation a dragging and displacement of the neighbouring parts, with final anchoring of the cerebrum to the cicatrix. In an acute ulcerative process rapidly advancing, such as an abscess, none can hesitate to evacuate the pus; it is not the living brain substance which is removed, but the peccant matter alone. Epilepsy presents quite another aspect. In the presence of a stationary cicatrix, or of a slow-growing neoplasm in the motor area occasionally producing fits, few would attempt the removal of such a large wedge of the motor region as to induce permanent hemiplegia. Even when the fits are much more numerous and aggravated, it is serious to contemplate the production of hemiplegia while attempting the cure of the fits. No doubt these epilepsies when long continued, especially in early life, are apt to lead to great and extensive instability of the motor cortex, so as to warp the whole cerebral function, and ultimately involve life itself. Still, how much better is the cure by the removal of a large wedge involving the greater part of the motor area? How many people would submit to have the lower and upper limb of the same side of the body amputated by disarticulation at their proximal joints? For this is what the hemiplegia amounts to in the process of cure of their fits. Numerous epileptics have been asked the question by me, but none have expressed the willingness to undergo such a cure. Even had they done so, the circumstances would require to be exceptional to induce one to hazard the life of the patient for so poor a result. It is true that corresponding wedges have been removed from the brains of monkeys, and these animals have survived for months thereafter. In man, also, they have been removed by others; in one instance, reported to me, the patient remained completely hemiplegic until his death, some months after. Nor is the removal of very large tumours, and large wedges of brain, free from immediate peril to life. In several instances, operated on elsewhere, death has ensued; one while the tumour was being removed from the brain, and one immediately after the completion of the operation.

In cerebral surgery, not only does one

require to localise the lesion, and to select suitable cases, but also, after exposing the brain and its lesion, to judge when to advance and when to hold the hand. In a case rightly localised from the motor symptoms, a tumour was exposed in the arm and leg centres, on the left side of the brain, but its dimensions were such as to cause me, after carefully contemplating them, to refrain from removing it, as it would have led to a hemiplegia of a much more pronounced character than what was present. Instead, the vessels which supplied it with nutriment, and which ran into its substance from the surface, were all ligatured, in the hope that this would effect a restraining influence on its growth. The patient recovered, and is considerably improved; although the fits are not quite cured, they are not so severe as formerly and are somewhat altered in character.

Anchoring of the brain and some of its consequences.—When injury has been inflicted on the surface of the cerebrum, followed by a plastic effusion and cicatrical formation, the superficial substance is apt to become soldered to the membranes, when these remain intact, which may in turn be soldered to the skull; or, in the event of their detachment, the brain may become directly adherent to the bone by means of cicatricial adhesion. Thus the surface of the brain becomes anchored or soldered to its rigid walls. It has no longer the free play within its water bed to expand and contract according to the varying states of the circulation; each variation producing a dragging of the brain at this spot, and through it the whole hemisphere at least is affected. Any sudden physical effort pulls on the brain producing a slight shock, a momentary disturbance, just as if the cerebrum had received a blow; vertigo results. People affected in this way cannot rise up quickly or perform any sudden movement of the body or head without experiencing a sensation of giddiness, which sometimes causes them to drop. Consequently they are often incapacitated from pursuing their usual vocations. Following upon this, the grey matter of the cortex immediately surrounding the cicatrix, by the incessant movement, is apt to become unstable and to produce fits. Some cases of traumatic epilepsy are thus caused. Further, if the cortical irritation be continued, encephalitis is occasionally produced, often appearing in a chronic form, and long remaining so, though susceptible of being lit up into an acute affection. If the temperature remains high, active interference is apt to induce an extension of the encephalitis. Operation in such cases should be, when possible, postponed. The disregard of this advice has to my knowledge in one instance hastened the fatal issue, encephalitis becoming rapidly general.

False hernia cerebri.—It is true that round many neoplasms there is a zone of encephalitis, and should this be extensive and of the nature of red softening, false hernia cerebri is prone to form. It was supposed that false hernia cerebri was entirely due to decomposition, many recent writers averring that it cannot occur unless when operations are conducted non-antiseptically, basing their belief on experimental investigations conducted on brains in a physiological state. Had they concluded that the formation of false hernia cerebri after operation was principally caused by decomposition, and always so when it occurred after operation on a physiological cerebrum, they would have been right. The consistence of false hernia cerebri is identical with red softening of the brain, occurring in idiopathic affections in which there had been no operation. In one instance, in which trephining was performed for the relief of pressure causing total hemiplegia, and where the symptoms either indicated acute encephalitis or abscess, or both, the moment the dura mater was opened a large mass of red encephalitis protruded through the membranes, forming a false hernia cerebri on the surface of the scalp. This encephalitis was not occasioned by septic matter introduced through a wound, as it occurred at the moment the wound was made. Round neoplasms red softening sometimes exists, and interference might possibly occasion an extension of the affection, though were the operation conducted

with strict antiseptic precautions the possibility of its formation would be reduced to a minimum. With this exception there has been no false hernia cerebri after any of my operations.

Reimplantation of bone, to fill the hiatus in the skull left by injury or made by operation.—Osseous defects in the cranial wall had hitherto remained permanent, the surgeon making no effort to fill the gap. The brain in the majority of cases has thus been exposed, the thin membrane forming an insuffi cient covering, the patient being doomed for the remainder of his life to wear some kind of plate as a protection from injury. Since 1873 the portions removed by me from the skull have been carefully preserved, rendered aseptic, divided into minute fragments and reimplanted. Whenever there has been immunity from suppuration these have grown and the continuity of the osseous wall has been preserved throughout. In a case of injury nearly one-half of the left anterior portion of the skull was broken into fragments, which lay in a confused mass, mixed with brain substance, shreds of membrane, hairs, debris of lime and blood. The portions of bone were all rendered aseptic, divided into fragments, and replaced, quite a mosaic work being thereby formed. On the tenth day, a portion of the damaged scalp having sloughed, exposed four of the reim planted pieces, two of which, lying side by side, presented a striking contrast; one being suffused with the pinkish blush of life, the other with the pallor of death. With the exception of two fragments, which shed, all the others remained, grew, and now form a firm osseous wall, affording complete protection. This case, operated on four years ago, will be shown at the demonstration in the Royal Infirmary, along with many others, where lesser defects have been filled. At the same time a boy whose humerus has had restored by bone-grafting will be presented. He was operated on ten yearsa go, and the bone has grown in length and thickness since.

The note elicited on percussion of the skull an aid to diagnosis of the consistence of intra-cranial contents.—When the skull is intact and the ventricles distended with fluid, such as may arise in consequence of tumour in the cerebellum, exercising pressure on the fourth ventricle, the percussion note elicited affords indications of the altered consistence of the intra-cranial contents. In some instances this note has been found prior to the exhibition of other symptoms, indicative of the presence of tumour in the middle lobe of the cerebellum; it, however, became distinct at the later stage. Post-mortems have fully borne out the diagnosis. The percussion note, when properly fenced, is therefore an aid to the altered consistence of the intra-cranial contents. It is clear that it will be of most value in early life in the diagnosis of tumours of the cerebellum.

Statistical résumé.—Of twenty-one cerebral cases (exclusive of fractures of the skull with brain lesions, the immediate effect of injury) in which operations have been performed by me, there have been three deaths and eighteen recoveries. Of those who died all were *in extremis* when operated on. Two were for abscess of the brain, in one of which the pus had already burst into the lateral ventricles; in the other, suppurative thrombosis of the lateral sinus had previously led to pyæmia and to septic pneumonia. The third case was one in which there existed, besides a large subdural cyst over one hemisphere, extensive softening at the seat of cerebral contusion on the opposite hemisphere, accompanied by œdema of the brain. Of the eighteen who recovered, sixteen are still alive in good health, and most are at work; leaving two who subsequently died, one eight years after from Bright's disease (she in the interval being quite well and able to work), the other forty-seven days after from acute tubercular enteritis.

Operations for the relief of paraplegia caused by pressure on the spinal cord: six cases in which the posterior arches of the vertebræ have been removed.—Turning to another portion of the nervous system, to which only brief allusion can be made, it is found that certain sensory and motor phenomena due to lesions within the spinal canal are amen-

able to operations, which are attended by a measure of success sufficient to offer a prospect of relief to a distressing and hitherto regarded as a hopeless class of sufferers. The spinal membranes and the cord itself can be exposed, and neoplasms and encroachments upon the lumen of the canal may be removed therefrom without unduly hazarding life. Such interference is unsparingly condemned by writers on the subject, their remarks, however, being applied to injuries, as no such operations have been hitherto contemplated in idiopathic cases. They contend that they are, first, full of danger, being difficult, prolonged, and attended by profuse hæmorrhage; secondly, that the operation could hardly benefit the patient; and thirdly, that no one had yet been able to present a successful case. Each of these points has now lost its validity. The first operations of this kind were undertaken by me for the relief of paraplegia due to angular curvature of the spine. In such cases pressure may be exerted on the cord either by connective tissue neoplasms, or by direct displacement of the bodies of the vertebræ, both lessening the lumen of the canal. By lifting the laminæ from the affected part, the tumour could be removed, and relief at the same time given to the compressed cord were the osseous walls in front found to encroach upon the calibre of the canal. This was successfully carried out by me first in 1883. By the making of an incision on to the tips of the spinous processes and severing the tendinous connexions, and then shelling the soft parts from the bone with periosteal elevators, the hæmorrhage was so trifling as to be, for the most part, arrested by sponge pressure, and, with suitable instruments, the operation, though demanding care, was easy to perform.

Case of paraplegia with incontinence of urine and fæces due to connective tissue tumour at seat of angular curvature of spine; completely cured by removal of tumour and laminæ of vertebræ.—In 1882, a boy aged nine years, came under observation, suffering from complete sensory and motor paraplegia, with incontinence of urine and fæces, which had existed for two years previously, but had been absolute during the last eighteen months. For three years he had had angular curvature of the spine, most marked between the fifth and seventh dorsal vertebræ, for which he had been treated by extension and plaster jackets. When seen by me the curvature had become fixed by ankylosis of the bodies of the vertebræ. Treatment by extension and plaster jackets was, however, tried again, under direct supervision, in the hope of amelioration. It proved futile. The limbs were livid and cold, affected with marked spastic rigidity, and with wasting of the muscles. The symptoms exhibited pointed to irritation of and pressure on the spinal cord, at about the level of the sixth dorsal vertebra. Either of two conditions could have produced the pressure symptoms; the existence of a connective tissue tumour, as Charcot points out, occurs in such cases inside of the canal, or by direct encroachment on the canal by displacement of the bodies of the vertebræ. In the former case, the tumour could be removed on exposing the theca, by elevating the laminæ of the affected vertebræ; in the latter the same procedure would permit the cord to expand backwards, thus receding from the point of pressure. The paralysis having existed slightly for two years, and markedly for eighteen months, and showing no signs of amelioration under ordinary treatment, this operation was deemed expedient. Dr. Alex. Robertson saw this case and agreed in the hopelessness of any other procedure than operation. On May 9th, 1883, the laminæ of the fifth, sixth, and seventh dorsal vertebræ were removed. There was no pulsation in the portion of the cord exposed. Between the theca and the bone there was found a fibrous neoplasm of an eighth of an inch in thickness, which was firmly attached to the theca and covered about two-thirds of its circumference. This was carefully dissected off. The cord was then able to expand backwards, and its pulsations, which up to this period were absent, began to show themselves, especially opposite the fifth dorsal. Twenty-four hours after the removal of the pressure the limbs had lost their livid colour, were distinct-

ly warmer, the spastic rigidity had greatly lessened, the sense of tickling the soles had returned, and that of touch had improved. The first return of movement was observed eight days after. Soon he had perfect control over his sphincters. Six months subsequently he was able to go about without support. Five years afterwards he walked three miles to pay me a visit. He attends school regularly, joins in all the games, including football, and he says he feels quite strong.

A second but more aggravated case.—In 1884, another case was seen of a somewhat similar kind, though much more aggravated, the symptoms being so far advanced as to indicate organic changes in the cord itself which rendered operation almost hopeless. It was only on the urgent and touching appeal of the girl herself that the operation was undertaken. A dense connective tissue tumour existed between the bone and the theca, which was so firmly adherent to both that in some places the theca was elevated along with the neoplasm. The portion of the cord thus exposed was shrunken to about half its normal dimensions, and lay like an inanimate rod. After elevation of a sufficient number of laminæ to expose a portion of the cord, which pulsated, the pulsations were communicated to this rod, pushing it from above downwards, but there was no distensile pulsation in the rod like part of the cord. From the whole appearances presented at the operation, it was considered that there was no hope for her recovering from her paralytic state. However, ten hours after the operation, the limbs had lost their lividity, felt warmer to the touch, and the patient said she experienced "a sensation as if she were dreaming that her legs were on and hot water was running through them." From the fourth day after the relief of pressure she had continence of urine and fæces, for which alone she declared she would willingly have undergone the operation. Sensation quickly returned to the limbs; motion very slowly. Six months after she could move her limbs freely. Eight months subsequent to the operation she walked a quarter of a mile. She stated she could perform many light duties in the house besides attending to herself. She has since been very well and able to enjoy life.

A third case was also successful, but two others have not been so. One succumbed a week after the operation, the other some months later, to an attack of general tuberculosis. In both of these the temperature was high prior to the operation, and was subject to exacerbations, indicating an activity in the tubercular disease at some part distant from the ankylosed angular curvature. Since this experience no case has been deemed fit for operation in which the temperature did not run an even, regular, and continuously afebrile course.

Abscess in the posterior mediastinum evacuated successfully.—In connexion with these cases, an abscess in the posterior mediastinum, which was exercising pressure on the heart and bronchi and threatened life, was evacuated with complete success.

Compression of the cord from traumatism.—Another class of cases is that of localised compression of the cord arising from traumatism. Traumatic lesions are, as a rule, so gross, and the destruction so complete, that in such operative treatment can be of little service; still there are cases in which traumatism has produced localised pressure, primary or secondary, which can be relieved.

Paraplegia from traumatism cured by elevating connective tissue tumour and depressed arch of the twelfth dorsal vertebra.–From a coal-pit accident a man, twenty-two years of age, received a severe injury to the spine at the level of the lower dorsal vertebræ, which caused absolute motor paralysis with incontinence. There was marked hyperæsthesia of the affected parts, which increased in severity during the first three weeks, so that he could not bear to have the floor shaken or his limbs touched. Between the third and fifth week a rapid change took place. At the termination of that period the muscles of the lower limbs would not respond to electricity; they had become so shrunken and wasted that the contour

of the bones stood prominently out, and, notwithstanding massage of the limbs after the cessation of the pain, the flexor muscles had markedly contracted, causing drooping of the feet and toes and fixation of the joints. Later, the skin over the bony prominences became red, pressure points and bedsores formed, irrespective of the most scrupulous attention; the urine became ammoniacal and his temperature ran high. It was evident that a fatal issue was imminent unless an attempt to relieve the pressure on the spine was at once made. In February, 1885, this was done. The lower dorsal and first lumbar were exposed. The arch of the twelfth dorsal was found fractured and slightly depressed, and between it and the theca there existed a connective tissue tumour, measuring nearly a quarter of an inch in antero-posterior diameter, and extending from the eleventh dorsal to the second lumbar vertebra. Both above and below the twelfth dorsal the tumour gradually shaded off to about one-half of its thickness at that point. It was confined to the posterior aspects of the canal. This tumour was carefully dissected from the theca. The same night there was a decided improvement in the warmth of the lower limbs. He began to move his toes on the third day. A month afterwards the contracted tendons about the ankle and feet were extensively tenotomised to relieve the structural contraction, after which the motor power rapidly increased. He was soon able to walk with support, which a year subsequently he discarded, and now can move about with ease but with paraplegic gait.*

Here are, therefore, six cases in which elevation of the posterior laminæ of the vertebræ has been performed; four of these have completely recovered and two have died, one from extension of tubercular disease months after the operation, and after the wound had healed, leaving one in which the operation possibly hastened the death of a patient who was otherwise in such a helpless and hopeless condition. Such operations are now beginning to be practised by others. Mr. Horsley a few months ago published a successful case in which a somewhat similar operation had been performed for the removal of a small tumour of the theca diagnosed by Dr Gowers.

In conclusion, let us remember that the same phenomena by which we are now able to recognize certain cerebral lesions, and locate them in precise areas, were exhibited by patients who came under the eye of our surgical predecessors, some of whom must have had the album of their memory filled with such impressions, yet they saw not their import. They were so hampered by the inculcated physiological dogma of the time that their true significance never dawned on them. The facts were reflected from their brain, as objects from a mirror, and no more. Gentlemen, there are all around us phenomena, each with its hidden truth obtrusively impressing our senses, and how do *we* fail to read their riddle?

*These last two cases were shown at the Pathological and Clinical Society, Glasgow, December 22nd, 1885, and published in the Glasgow Medical Journal, and notes of the same appeared in the British Medical Journal for December 1885.

Society Reports.

TRANSACTIONS OF THE GYNECOLOGICAL SOCIETY OF CHICAGO.

REGULAR MEETING MAY 25, 1888.

The President, HENRY T. BYFORD, M. D., in the Chair.

DR. E. C. DUDLEY read a paper entitled:

A YEAR'S WORK IN ABDOMINAL SURGERY.

DR. C. T. PARKES.—I think Dr. Dudley is to be congratulated upon these interesting and successful cases, but I think the Doctor will not have done all his duty until he has given us some of the snags he has met with in the shape of deaths. These cases are full of interest, but I have always found the cases that have died have been the ones from

which I have learned the most. I have no doubt that will come in due time.

So far as my experience goes in the removal of the uterine appendages, in every case there has been found disease of the appendages or ovaries, there was either closure of the internal or external opening of the tube, some enlargement, or some disease of the ovaries themselves, which really pointed to the condition of the appendages as the cause of the trouble.

In the case Dr. Dudley reports of cyst with drainage, that had no connection with the uterus or ovaries, which, after an opening was made into the abdominal cavity and the finger introduced, the ovaries and uterus were felt perfectly normal, gave rise, in my mind to the suspicion that instead of being a cyst with a distinct and separate wall that could not be recognized or differentiated from the peritoneum, it was a case similar to one I have seen, which would come under the appellation of an encysted dropsy, where the inflammation of the peritoneal cavity had been of such a nature as to agglutinate the intestinal folds together, and formed a perfect roof to the cavity, and the fluid had gone on accumulating until the quantity of fluid had shown the external manifestations of a cyst; when cut into, the cavity was found to have no connection with the uterus. It is what Spencer Wells calls an encysted dropsy. I think it would be difficult to say that there was a true cyst-wall in a case of that kind, if no separation whatever could be found. The character of the fluid he mentions rather points to that condition.

I was exceedingly well pleased to hear the doctor speak of his experience with reference to antiseptic precautions, it agrees with my experience so far as abdominal work is concerned. In a case I reported a few years ago, the only case in which I had had much trouble in that series, and in which I carried out Lister's instructions, it gave me more trouble than all the rest, and I think it was from using too strong antiseptic applications, so I resumed the same course the doctor has indicated with regard to antiseptic precautions in abdominal cases. Several years ago, in the Chicago Medical Society, I took occasion to refer to the fact that I had tried the Staffordshire knot, and it failed. I did an operation for the removal of the uterine appendages before a class at college, and desired to illustrate the Staffordshire knot. I thought I understood all about it, and when I had it applied, cut off the appendages and returned the stump to the abdomen, but to my astonishment the wound filled with blood, and I had quite a time to fish it up from the cavity and stop the bleeding which was going on freely. I recognized then the very fault the doctor has illustrated, the trouble was that I did not secure the pedicle at all in tying the knot. Recently, on a visit to New York, I saw Prof. Polk do two laparotomies for uterine disease. In one of them I asked him to illustrate to me the application of the Staffordshire knot, and he did it in the manner which the doctor has illustrated, and showed me plainly where my fault had been in not pulling up the ligature on each side before the knot was tied.

So far as my experience goes, in many of these cases which require the removal of the appendages, there are no symptoms that can be fixed, so far as the physical examination is concerned, as coming from any disease of the uterus or appendages, but after the operation is done it often turns out that disease is found in the tubes.

There was one point I wished to speak of—the case of epilepsy relieved by an operation. I am associated with a gentlemen who has had a great deal of experience in one of the insane asylums with epileptics, and he has found it to be a fact that no matter how small an operation may be done, and no matter where it is done, as a direct effect of that operation the patient is relieved of epileptic seizures for some time.

Dr. Henry T. Byford.—I have had a great deal of experience with Tait's knot, but it has all been confined to one case. I pulled the threads tightly before tying, closed up an apparently dry peritoneal cavity, and lost my patient from hemorrhage. The ligature had not held. As the method which I ordi-

narily employ has never failed me, I have not since felt inclined to try the more complicated varieties, which, although they may be as safe, are more difficult of application. I pass a double thread through the edge of the ovarian ligament and through the mesosalpinx near the Fallopian tube, thus tying up the ovarian ligament, Fallopian tube and ovarian artery on one side, the rest of the broad ligament on the other, and then the whole stump *en masse* with the same threads.

With regard to after-treatment, I think that one of the most important recent advances has been the administration of saline laxatives in place of opiates; as soon as symptoms pointing to peritonitis, sepsis, or intestinal obstructions make their appearance, they must be given early.

Dr. Knox.—What is your object in getting antiseptics out of your ligatures and instruments?

Dr. Dudley.—Not having removed the cyst in case 9, I am unable to prove that a cyst existed. I think Dr. Parkes would readily agree with me had he been present at the operation. Among those who saw the operation there was no difference of opinion.

Fumigation of an operating room is undoubtedly an element of safety, although it is practically impossible to sterilize the air of a room by this or by any other means, because, after fumigating, other air will come in. It is evident, however, that, under ordinary conditions, the danger of infection from the air is very small as compared with the danger from non-sterilized fingers, instruments, ligatures, sponges, etc. The object of washing instruments, sponges, and ligatures free of antiseptic drugs is to avoid the irritating influence which these drugs might exert if brought into direct relation with the operation.

The question has been raised relative to the removal of the appendages for the relief of dysmenorrhœa. In none of the cases reported was dysmenorrhœa the prime indication for the operation, although dysmenorrhœa was frequently one of a variety of morbid conditions, the pathological causes of which it was hoped the operation would remove. In case 2 there had been dysmenorrhœa, but the operation was not done on that account, although I would not say that it never should be done in an extreme case, incurable by other means.

Dr. Jaggard.—What was the indication for operation in this case of removal of the appendages? The specimens show no appearance of disease that I can make out.

Dr. Dudley.—This was a case of retroflexion, which I had failed for nearly two years to support by artificial means. The patient had suffered for several years from recurring attacks of pelvic peritonitis; the left ovary was prolapsed and was the seat of constant unremitting pain. Although urged to do this operation for a year, I had refused, and was only induced to undertake it after a long effort to give relief by other means. There was no element of hysteria in this case.

The patient had been a victim of more or less constant and acute pain; since the operation she has been free from pain. She had been obliged to spend a large part of each day in the reclining position; since the operation she requires the usual amount of rest at night, and no more. Her nutrition had suffered to an extreme degree from reflex gastric disturbances and she was unable to take much food of any kind; soon after the operation digestion became normal, she could take all kinds of wholesome food, and the anemia and emaciation promptly disappeared. She had been unable to walk or stand without great difficulty, or to endure the least fatigue; since the operation she has been able to swim, to walk, and to dance without limit. The patient had been a pitiable invalid; after the operation she became well.

In most of the other cases the appendages themselves showed more gross indications of disease, but in this case the removal of the appendages has given relief to a most distressing and most obstinate malady, which was just as serious for the patient as it could possibly have been had the ovaries and tubes been the seat of every pathological develop-

ment which has ever been known to affect these organs. In fact, the results have, perhaps, been more brilliant than in any other case of this series.

I would not refuse to remove the ovaries and Fallopian tubes for the relief of a malady which could not be cured by any other means, if that malady rendered the patient a miserable and useless invalid and if the patient could be cured by that operation.

Much disease may exist in the appendages with very little indication for their removal. A proposition which should make the extent to which the appendages are diseased proportionate to the indication for their removal, would be untenable.

The operation is certainly liable to an immense amount of abuse, a kind of abuse which is most serious for the patient, and on this account it is properly becoming the subject of vigorous criticism which should have the fortunate effect of limiting its performance to suitable cases. The removal of the appendages produces senile atrophy of the remaining reproductive organs, even though these organs be the seat of disease. Cessation of function follows therefore, even though that function be modified by disease; that is, with the atrophic process, pathological conditions cease. Consequently a dangerous possibility of this operation lies in the fact that it is certainly capable of curing a number of maladies which ought to be relieved by other means. The temptation to produce brilliant results by a prompt and certain remedy must always be great when other measures are long, tedious, and uncertain.

The Antipyrine Craze in Paris.—Dr. Warren-Bey writes to the *Virginia Medical Monthly* that the extent to which antipyrine is employed in Paris is incredible. The average French doctor prescribes it for all the ills that flesh is heir to; it has become as necesssary an article in every lady's boudoir as her perfume-bottle; scarcely a man can be found who has not some of it carefully stored away in his pocket-book; children are raised on it, and cry for it as for their *biberons*; and, in fact, they all take it, and for all things, but especially for *migraine*, which, as you know, is pre-eminently the malady of those who indulge in social dissipation. "That you may form an idea of the extent to which it is the rage, I will give you an incident as it was told me by the party immediately concerned: Mrs. P.—— was dining out recently in the Faubourg St. Germain, when she chanced to mention that she had suffered with headache during the day. Instantly, from the pockets of thirteen of the fifteen guests who were present, antipyrine was produced—in capsules, wafers, powders, and elixirs—and she was compelled to take a dose then and there, notwithstanding her earnest protest, and her assurance of entire relief before starting from home."

Hydramnios of Pregnancy Mistaken for Ovarian Tumor.—Mr. H. A. Reeves, of the Hospital for Women, Soho Square, London (*British Med. Jl.*), reports the case of a woman, aet. 21, married 4 years, who was sent into hospital with a large and rapidly increasing abdominal tumor. She had, a month before, being then four months gone, had a fall, since which she had had acute pains. Under observation the swelling increased rapidly. A large pyriform, fluctuating mass occupied the left flank extending upward under the ribs; in the right flank was another rounder and smaller cystic tumor. Per vaginam the signs of pregnancy were elicited, but as the tumor was bipartite and asymmetrical, as no uterine contractions could be felt and no fœtal heart-sound demonstrated, a long median exploratory incision was made revealing an exclusively uterine tumor extending up to the ensiform cartilage. Artificial labor was thus necessitated. The os was accordingly dilated, the membranes ruptured, and several gallons of amniotic fluid together with twins of about 5 months development removed. The puerperium ran a normal course except a rise of temperature to 104° on the fourth day which was relieved by calomel.

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BALTIMORE, SEPTEMBER 8TH, 1888.

Editorial.

DANGER FROM THE USE OF COCAINE.—A considerable amount of evidence has now been adduced as to the dangerous effects of this much-used drug. It is seen that even in ordinary and what are usually safe doses serious and fatal consequences have been produced.

Cocaine is used very rarely by the stomach. It is usually applied in solution of various strength to a part, less often it is administered hypodermatically. Its ill effects have been witnessed in both modes, but especially in the latter, doubtless because thus a larger quantity gains admission to the circulation. The earliest experiments led observers (*Merck, Da Costa, Ott*) to regard it as a cardiac stimulant; *Da Costa's* studies led him to suggest its use "in many a condition of collapse, of weak heart or heart failure, and in low fevers."

Further experience shows that quite the opposite effect is to be anticipated. This divergence may be due to a difference in the quantity used now and formerly.

The toxic effects have manifested themselves in a tendency more or less marked to collapse. They come on very suddenly, usually within a brief period after administration, and consist of great weakness and frequency of the heart's action, pallor or cyanosis, faintness, prostration, perspirations, dyspnœa, sighing, slow and irregular breathing, a sense of fulness in the head, vertigo, dilated and fixed pupils, mental excitement, indistinct speech, tingling sensations, staggering gait, nausea, vomiting, delirium, convulsions, coma, apparent death, real death. The milder of these were noted shortly after the introduction of the agent four years ago, but observers were too much dazzled then with its marvelous effects to lay much stress on them, and they were considered as but fleeting in character and leaving no after-effects.

It is somewhat remarkable that the conjunctival surface seems to enjoy an immunity to the ill-effects of the drug as compared with other mucous surfaces. If we may judge by the cases which we have collected the nose and the urethra seem to be particularly susceptible. Toxic effects are noted from a 4 and 5 per cent. solution on lint to the interior of the nose; from a 2 to 20 per cent. spray to the nose and larynx, and from a 4 and 20 per cent. solution into the urethra. Even the cavity of decayed teeth is not exempt from this susceptibility, extreme symptoms being reported from 3 drops of a 20 per cent. solution applied on cotton (*N. C. Med. Jl.*, July). Epileptiform convulsions have been reported from applications to the urethra and from subcutaneous injections of ½ grain or even less to 5 grains, by Earle (*Maryland Med. Journal*, Jan. 15th and March 19th, 1887), Harrison (*Daniel's Texas Medical Jour.*, June, 1888), Slayter (*Brit. Med. Journal*, Feb. 25th, 1888), and Simes (*Medical News*, July 21st, 1888).

The first three of these were hypodermatic administrations; the last, which alone proved fatal of all the cases in our collection (although "several well-authenticated fatal cases are on record") was one of application of one drachm of a 20 per cent. solution to the urethra, preparatory to an internal urethrotomy for stricture. "The instrument had scarcely been taken out of the urethra when the patient made a foolish remark, the

muscles of his face began to twitch, the eyes staring, pupils dilated, frothing at the mouth, face much congested, respiration interfered with and ending in a violent epileptiform convulsion, lasting for some seconds. These convulsions were continued with increasing violence, several times a minute, the whole muscular system taking part in the spasms, requiring considerable force to keep him from falling off the table. The action of the heart was not much interfered with and appeared only to be secondarily affected. It was the respiratory function that seemed first to fail, and then the heart's action became irregular and slow. The breathing was more and more interfered with, in fact the entire surface of the body became deeply cyanosed, the pulse slow, and at the end of twenty minutes from the first convulsion had ceased to beat. The man was dead."

Everything was promptly and efficiently done but nothing had any influence over the result. On *post-mortem* the brain, liver, lungs and kidneys were found to be congested; the heart was normal. The urethra was examined for rupture but nothing found.

Dr. J. Clark Stewart (*Medical News*, Aug. 18th,) reports a case of epileptiform convulsions following an injection of one and a half drachm of a 4 per cent. solution of cocaine hydrochlorate for the same operation and disease as in Dr. Simes' case. In this case, however, unlike the others, there was a previous history of *petit mal*, and the reporter thinks the cocaine may have simply acted as the exciting cause of a major attack in a person already suffering from the disease.

Experiments upon animals showed identical results from single injections; when the injections were repeated in small amount the post-mortem revealed marked congestion of the nerve centres, albuminoid degeneration of the cord and ganglia, fatty degeneration of the heart, atrophy of the liver, etc.

Locally inflammation and gangrene have been reported as resulting from the use of cocaine, and we may further note the evils of its habitual use. Dr. Orpheus Everts, superintendent of the Cincinnati Sanitarium, in his annual report, says that further observations confirm his previously expressed opinion that it is a fascinating and dangerous drug to persons of unstable or neurotic organizations, especially to those liable to become drunkards or opium-eaters.

Among remedies employed in the treatment of cocaine poisoning stimulants naturally hold a perminent place, as ammonia, alcoholics, ether, and digitalis, by injection, inhalation or internally, mustard and hot applications externally. Subcutaneous injections of morphia have been found useful, but the remedy above all others, as might be inferred from its well-known effects and from the symptoms and post-mortem appearances, is nitrite of amyl, inhaled. This seems to have been uniformly successful whenever used. Dr. Simes does not state whether he used it or not. In one case, the reporter, Dr. L. G. Broughton, of N. C., thinks that he saved his patient by the hypodermatic injection of $\frac{1}{100}$ grain of strychnia. He had, however, previously used brandy in large quantities by the mouth and hypodermatically.

In studying the above and other cases that have been reported, we may, perhaps, venture to formulate some conclusions, viz:

1. Certain persons possess an idiosyncrasy to cocaine which cannot be foreseen or entirely guarded against.

2. Cocaine exerts its toxic effects upon the nervous centres and secondarily the heart.

3. Its evil effects are most liable to be seen in neurotic snbjects.

4. The danger in cocaine poisoning is mainly from paralysis of the heart, syncope.

5. It may be well to precede its use by the administration of alcohol or other cardiac stimulant as is done with chloroform.

6. Special care is needed in "weak heart," and organic heart disease.

7. The subcutaneous administration is

dangerous and should be avoided.

8. The use of the stronger solutions is dangerous and unnecessary.

9. The treatment of cocaine poisoning consists of measures to rouse the heart, especially inhalations of nitrite of amyl.

Congress of American Physicians and Surgeons.—We have received a very handsome programme, 47 pages, of the first Triennial Meeting of the above Congress, to be held in Washington, *September 18th, 19th and 20th.* The meetings of the Congress and of the different component societies will be held in the Grand Army Building, the National Museum, and in the Arlington, Willard's, and Welcker's Hotels. The general meetings will be held in the evenings whilst the mornings and afternoons will be devoted to the work of the 13 or 14 societies. The preliminary meeting for organization will be held at 1 p. m., September 18th, in the main hall of the Grand Army Building. The evenings will be taken up as follows: *Sept. 18th.* Papers and discussion on Intestinal Obstruction by Drs. Fitz, Senn, Pepper, Warren, Morton and others.

Sept. 19th. Papers and discussion on Cerebral Localization by Drs. Mills, Park, Ferrier, Horsley, Keen, Seguin, Weir, and others.

Sept. 20th. Address of President Dr. John S. Billings, on *Medical Museums,* followed by a reception. The Army Medical Museum and Library will this evening be lighted and open for inspection.

Maryland is well represented in the meeting of the societies. Papers will be read by Drs. Tiffany, Michael, Donaldson, Sr. and Jr., Mackenzie, Hartman, S. Johnston, W. C. VanBibber, Chew, Martin, H. H. Donaldson, Howell, Rohé, Sternberg, Miles, and Theobold.

Discussions will be opened by C. Johnston, Tiffany, Michael and others.

Dr. I. E. Atkinson will deliver the Presidential Address before the Dermatological Association.

Demonstrations in Pathological Anatomy will be given by Drs. Welch and Councilman.

This Congress promises to be one of the most important meetings of the Medical Profession, in a scientific point of view, ever held in this country, and we may congratulate ourselves on the honorable and prominent part which Baltimore will take in it.

The meetings will be open to members of the profession generally.

Miscellany.

Gastroliths.—A curious and, as far as is known, unique case of gastrolith is recorded in one of the Dutch journals. A druggist had a circumscribed tumor in the epigastric region, the position of which varied on respiration, and which was tender on pressure. Medicines had no permanent effect upon it. Spleen, liver and kidneys were normal as to position and size. The appetite was very good and the bowels were regular. Vomiting of a small quantity of fluid containing mucus and bile, but almost always free from hydrochloric acid, occasionally took place. Nausea was constant, and it was said that hematemesis took place, but this was not actually observed. Gradual emaciation took place, the look became cachectic, and indolent swelling of the left supra-clavicular and axillary glands was noticed. The patient was examined under an anæsthetic and the stomach washed out, but exploratory incision was steadily refused. The diagnosis, according to the probabilities, was cancer of the stomach. The case ended fatally, and the autopsy showed that the stomach, which was of normal size, contained a concretion having the outline of the organ and almost filling it. At the pyloric end lay two smaller fragments of the size of hen's eggs. The weight of the tumor was 885 grammes (a little over 28 ounces). It had a stong fecal odor, but contained no skatol. No nucleus was present. Microscopic examination showed starch granules, cells containing chlorophyll, bundles of vessels, but noth-

ing to determine the animal origin of the concretion. Chemical analysis showed that it contained 0.56 per cent. of nitrogen. It was observed that with the exception of the formation in Langenbuch's case described in 1884, which contained no hair, all the others observed in the human subject were composed more or less of hair. In the present case, on the other hand, the tumor was identical in constitution with the "food balls" of ruminants, and stood alone.—*Med. Press*, July 18, 1888.—*Med. News.*

Tea and Teeth.—In the cities of the United States, where tea is consumed in much smaller quantities than in this country (England), the teeth decay more rapidly than with us. The climate, the many indigestible articles of diet, the extreme nerve-tension of the Americans, and other causes affecting the nervine and general health of that great people, tend to induce a dyspeptic condition which always seemed to me to be largely responsible for their premature dental decay.

At the same time there can be little doubt that the white bread and tea (a common though defective staple diet of too many of our own population) is a frequent cause of gastric trouble. Next to tea, alcohol, by its depravity of the digestive apparatus, has always seemed to me to interfere with tooth nutrition and soundness.—Dr. Norman Kerr, in the *British Medical Journal. Texas Health Journal.*

Saccharin.—At the last meeting of the Conseil d'Hygiène, etc., M. Lépine, Sécrétaire Gén. de la Préfecture de Police, stated that he had received a communication from the Chief of the Laboratoire Municipal concerning the discovery of saccharin in certain kinds of food. On May 11th a sample of champagne given in at the Laboratory was analysed, as it had a very sweet taste, but left an unpleasant taste in the mouth. It contained very little sugar but some saccharin. The discoverers of saccharin pointed out the use of this substance in diabetes, and were not disinclined to bring about its use in confectionary, to lower the prices of articles made with sugar of beet-root or cane sugar. They have achieved their end and have introduced syrups of glucose and mixed glucose and saccharin glucose containing 1 gramme of saccharin per kilogr. is equal to its weight in beet-root sugar, and is sold at 41.25 francs per 100 kilos. M. Lépine observed that the use of this new product threatens the interests of the Treasury, of agriculture, and of the sugar industries. It is also possible that it may injure the public health, and even if not injurious, it does not possess the nutritive qualities of sugar. A commission composed of M M. Péligot, Jungfleisch, Riche Armand, Gautier, Dujardin-Beaumetz, and Proust, has been appointed to examine the question.—*British Medical Journal, Correspondence from Paris.*

Alleged Restoration of Sight from a Flash of Lightning.—A paragraph with the above heading appeared in a Wolverhampton paper, and has been copied into several London papers; it affords a very good example of the very flimsy evidence that suffices to render the marvellous credible to the general public. As far as we can ascertain the facts are briefly these. The patient was injured by an explosion in a mine, one eye was totally destroyed, and he became unable to see with the other. He was in the hospital for seven weeks for "fits," and on leaving was led about owing to his defective sight. One evening, after a flash of lightning, he noticed that he "could see indistinctly objects near to him." And a few days later he could see to walk about without a guide. On inquiry we learn that for some time after the patient could only partially open the eye, that the cornea was opaque, and had been gradually clearing for many months past. In the absence of any authoritative statement as to the condition of the vision before and after the lightning flash, there seems no reason for assuming that the case was anything but an ordinary one in which the cornea was

slowly clearing. Nothing is more common than for a gradual improvement to be suddenly noticed when it has reached a certain stage.—*British Med. Journal.*

Sanitary Condition of Cairo.—The consul-general, in his dispatch dated July 23, 1888, states that "on the night of the 15th of June a heat-wave spread itself over Egypt, and it has since remained continuously. In a residence of three summers here I have experienced nothing comparable to it. The days have given air like that from the blast of a fiery furnace, while the nights have been intolerable from heat. The death rate throughout Egypt, which was already very high, suddenly mounted towards figures of decimation, and the destroyer has been reaping a great harvest of the dead. For the first week of this very hot weather the death rate rose in Cairo from a little over 40.0 to 76.8. The next week it was 71.6; the next 79.1, succeeded for the fourth week by 77.7. These figures present the average. In Bodlac and Darb-el-Ahmar, two quarters of the city, the death rate was respectively 103 and 86.5, in one case more than decimation, in the other very nearly decimation. Truly no Indian death rate, except in periods of wide-spread and most fatal epidemics, reaches the present record in the Egyptian capital.

"For five years past the health of Cairo has been growing worse, and yet during these years a special detail of English sanitary experts has been supervising a Khedival sanitary department, the main object of which has been to look after the health of the most crowded Egyptian communities. The sanitary administration costs the Egyptian Government annually about $200,000, not inclusive of publications and police service. The health of the large cities grows worse every year. The heavy summer death rate begins earlier in Cairo than in Alexandria. Just now a decidedly increased mortality is prevalent in the latter, and, following precedent, it will be much greater in August. Last year the death rate at one time in Alexandria was about equal to what it now is in Cairo. In some of the smaller cities the mortality has this year been greater even than the Cairo average, and about Damietta there has been typhus fever of a very fatal character. The rise of the Nile produces great humidity, and during August, September, and October no abatement of sickness may be hoped for. By the first of November a pleasing change comes, and from then until in the spring the temperature will be mild, the climate delightful, and health, for Egyptians, fairly good. It is gratifying, even under this burning sun and in hearing of these never-ending songs of death, to know that a season will come against which but few if any complaints may be entered."

July 25: "The average death rate for the week ended July 19, as shown in the health bulletin, reached 97.2, while in Darb-el-Ahmer quarter it amounted to 126, and in Bodlac quarter to 100. Total deaths in this city were 685.

"The average maximum temperature for the same week was 106½° Fahr.; extreme heat, 114½°. The average minimum temperature was 72⅓°; the extreme minimum, 72¼°. The observations are taken at the Khedival Observatory, at Abbaseieh, two miles north of Cairo, where the unobstructed sea-breezes produce a lower temperature than in the city or south of it. Were it not for the great relief in temperature at night, existence would be unendurable."—*Marine Hospital Sanitary Reports, August 24th.*

The Treatment of Uterine Myomata by Apostoli's Method.—Robson ("Lancet," June 23, 1888) gives details of several cases in which Apostoli's method was used. In one a large tumor reaching to the ribs had been reduced to a simple pelvic enlargement in a little over two months, a current of 150 to 270 milliampères having been used twelve times. Previous to treatment, menorrhagia had compelled the patient to use eighteen napkins twice a month. When treatment ceased she required only six napkins once a month. In another case the tumor had steadily increased, though nineteen applications had been made in the course of three months, each applica-

tion lasting ten minutes, and 180 to 300 millampères being used. In other cases hæmorrhage had been controlled and decided improvement obtained, and in no case had the treatment caused inconvenience. Apostoli's directions had been strictly carried out in all cases, and the author gave as his opinion that while electrolysis was a powerful agent for treating some fibroid tumors successfully, we must not expect too much from it, as in some cases it failed to be of any benefit. At present it is desirable that all cases which are treated should be reported, as a positive conclusion can not yet be reached from existing data. Cases in which there is subinvolution, endometritis, or hæmorrhage can hardly fail to be benefited. The author was in the habit of using a battery consisting of fifty-one pint Leclanché cells, a double collector, a water rheostat, and a Gaiffe's galvanometer.—*N. Y. Med. Jour.*

Too Many Doctors in London.— A provincial paper states that London is alarmingly overstocked with doctors. A quarter of the whole population gets gratuitous medical advice. To enable the doctors, as a class, to live and thrive, they should be in the proportion of 1 to 1200 of the lay inhabitants; and, adopting this equation, there are 1943 more doctors in London than there should be. Even Brighton is over-doctored, with one physician to each 753 of its population; while in Sheffield there is but one to every 3000. The existing state of things is bad, but the future promises to be worse. On an average 600 doctors die every year, and on an average those 600 are represented the following year, by 1800 novices. The specialists thrive. The baronets and the great consultants seem to get larger fees every year. On the other hand, there are many doctors now in the poorer parts of London who will see a patient, prescribe and supply medicine, at 6*d.* (twelve and a half cents) a visit.—*Col. and Clin. Record.*

Miller (of Moscow) on the Earliest Symptoms of Inherited Syphilis. —Attention is particularly called to fissures of the lip, especially the upper lip.

Parrot regards such as unmistakable signs of hereditary syphilis. It certainly forms a very frequent and early manifestation. The very earliest fissures on the upper lip are generally two, placed symmetrically on either side of the central portion. Relatively nearer are fissures on the lower lip. When such do occur there is usually only one, and that in the centre of the lip; but afterwards others may occur, and uniting, form ulcers. They are very painful, difficult to heal, and leave white scars, which are very persistent.—*Edinburgh Medical Journal*, July 1, 1888.—*Med. Analectic.*

Medical College of the State of South Carolina.—The death of the Dean of this excellent institution, Dr. J. Ford Prioleau, has caused some changes in the Faculty. Dr. R. A. Kinloch has been elected to fill that vacancy. The Chair of Surgery which Dr. Kinloch filled has been divided, so that hereafter he will be Professor of Clinical Surgery, and Dr. Manning Simons will be Professor of Didactic Surgery. Dr. P. Gourdin DeSaussure has been elected Professor of Obstetrics and Gynæcology—the chair held by Dr. Prioleau until his death.—*Va. Med. Monthly.*

Man's Power of Imagination.—The power of imagination is supposed to be stronger in women than in men, but this was not shown in a recent hospital experiment. Dr. Durand, wishing to test the practical effect of mind disease, gave a hundred patients a dose of sweetened water. Fifteen minutes after, entering apparently in great excitement, he announced that he had by mistake given a powerful emetic, and preparations must be made accordingly. Eighty out of the hundred patients became thoroughly ill and exhibited the usual result of an emetic; twenty were unaffected. The curious part of it is, that with very few exceptions the eighty "emeticised" subjects were men, while the strong-minded few, who were not to be caught with chaff, were women.—*New Orleans Picayune.*

Medical Items.

The British Medical Association has 12,000 members and a balance sheet in its favor—plant, investments, cash—of over $156,000.

Boyer, the French Surgeon wrote after the French war (1814) that "Surgery seemed to have attained the highest degree of perfection of which it was capable!"

In only 24 out of 536 cases of acute rheumatism in the collective Investigation Report of the British Med. Association did the salicylate treatment fail.—*British Med. Jour.*

Dr. Wm. A. Hammond is building a Sanitarium in Washington City for the treatment of curable cases of mental and nervous diseases. It will be thoroughly equipped with all modern improvements.

Dr. Thomas More Madden has for nearly 20 years used a mixture of two parts of ether and eau-de-cologne, with one of chloroform to render labor painless; it is comparatively safe, generally efficient and agreeable.

The 6th Annual Meeting of the American Rhinological Association will be held at Cincinnati, September 12, 13 and 14, 1888. The programme embraces numerous papers and discussions to which the profession are invited.

There are 16,930 practising physicians in England, a proportion of 1 to every 1642 inhabitants; and an increase in number of 21.7 per cent. since 1881. The largest number is found at Brighton, where there is 1 physician to 727 persons; next comes London with 1 to 939.—*Med. News.*

The German Physicians of the Late Emperor.—The German Emperor has conferred on Professor von Bergmann the Star and Cross of the Royal Order of Hohenzollern, and on Professors Gerhardt and Schrötter the Order of the Red Eagle (of the second class). —*Record.*

A dinner will be given to the Foreign Guests of the Congress of Physicians and Surgeons to be held in Washington City this month to which all members of the various participating organizations are invited to subscribe $20.00 through Dr. Busey 1545 I St., N. W., Washington, D. C.

Dr. Thomas Keith, the distinguished abdominal surgeon, has announced his intention of removing from Edinburgh, Scotland, to London, where a wider field presents itself for special work. Edinburgh's loss is London's gain.

A Fatal Banquet.—On the 26th of June last the alumni of the Marietta (Ohio) College gave their regular annual banquet. As it has turned out, it was literally a banquet of death. Between seventy-five and one hundred students, graduates, post-graduates and professors sat down to the festivities. Seven of them are dead, while some thirty others are or have been sick, several of whom are still hovering between life and death. The sickness has taken the form of typhoid fever, and it is thought to have been caused either by ice-cream eaten at the banquet or the water used in making the lemonade.—*Sun.*

Suppression of a Medical Journal.—Dr. Grant-Bey, writing to the Albany *Medical Annals*, states that the Egyptian government has suppressed the *Shifa*, a journal published in Cairo in the Arabic language. First the subscriptions were withdrawn, and then finally, notice of suppression was served. The article which was offensive to the British government in Egypt was an account of a visit by Virchow to Dr. Grant-Bey, in Cairo, written by the latter, and discussing the nature of cholera and the necessity of strict quarantine on every arrival from India.—*Record.*

An Army Medical Board will be convened in New York City, New York, October 1, 1888, for the examination of such persons as may be properly invited to present themselves before it as candidates for appointment in the Medical Corps of the Army.

Application for an invitation should be addressed to the Secretary of War, stating date and place of birth; place and State of permanent residence, and accompanied by certificates, based on personal acquaintance, from at least two persons of repute, as to citizenship, character, and moral habits: testimonials as to professional standing, from the Professors of the Medical College from which the applicant graduated, are also desirable. The candidate must be between 21 and 28 years of age, and a graduate from a Regular Medical College, evidence of which, his Diploma, must be submitted to the Board.

Further information regarding the examinations and their nature may be obtained by addressing the Surgeon General, U. S. Army, Washington, D. C.

Frozen Coffee.—Take two quarts of fresh filtered, or spring water, if obtainable, bring it to the boil, then add half a pound of the best old government Java coffee, roasted and ground; stir well together, cover and set aside on the range to infuse. Stir occasionally for the first ten minutes, then let it stand in a warm place till well settled. Now strain the coffee clear through a fine muslin cloth and add water to make two quarts, dissolve one pound of pulverized sugar in it and set aside to cool; then pour it into the freezer, add the whites of two eggs, and freeze the mixture to a soft ish texture. This frappe is generally served in high glasses. On the continent of Europe this ice is called "cafe mousseux," also, "cafe frappe a la glace." The fourth part of a vanilla bean is also sometimes infused in the coffee when making it, and tends to heighten the aroma of the coffee. Some persons also add half a pint of rich cream to it before freezing. The addition of these, however, are matters of taste and fancy.—*Confectioners' Journal.*

Original Articles.

A CASE OF HYSTERECTOMY.

BY W. W. KEEN, M. D., OF PHILADELPHIA.

Miss X., aged forty-two, American, author. Family history good. Previous personal history good up to about twelve years, when she began to suffer in many ways, pointing toward a uterine growth. After two years or more of treatment, Dr. S. Weir Mitchell recommended that the ovaries should be removed. This was done *per vaginam* by Dr. Wm. Goodell in the winter of 1876–77. The tumor diminished, but she had never been free from pain since, chiefly in the left hypochondrium, but extending both up and down. For between two and three years before I first saw her (January 25, 1887) her general health had been steadily growing worse, and the distress in the side increasing to such a degree that she was utterly unable to work, and was wretched alike in body and mind.

Status præsens, January 25th 1887: Slight woman, anæmic, not emaciated, complexion pasty. Heart and lungs normal. On examination of the abdomen externally a very slight abnormal increase in the uterus upward and to the left was detected. I supposed it the remnant of the old growth, but the patient did not desire a vaginal exploration made and I was unable to examine it further. There was here no pain or tenderness. An inch below the lowest angle of the ribs on the left side was situated a spot not larger than a quarter of a dollar, tender on pressure, and nearly corresponding in situation with a similar but less defined area of tenderness posteriorly. Most of the distress complained of was vaguely placed hereabouts.

The kidneys could be clearly outlined by percussion, and showed no change from the normal in their areas. The urine was natural, but sometimes contained a slight excess of uric acid formations; bowels always slightly sluggish and the appetite poor; no digestive trouble; she slept very ill, being unable to lie on the back or on the left side, as either position increased the pain in the side, and finally caused a suffocating sensation. It is also greatly aggravated by very slight physical exertion, by sitting long in one position, and by constipation. It is now so constant and severe that Miss X. complains of "losing her grip," of inability to work to good purpose, and of great irritability.

Treatment.—In spite of the previous ovarian and uterine trouble, the situation of the pain seemed to me to be so far from the former site of the ovaries that it was doubtful of their having any share in the present difficulty, though the thought of a nerve caught in the stump left after their removal occurred to me. My treatment was at first directed to the slight lithæmia. Alkaline waters and a regulated diet did little good, and I returned to the view of the implication of a nerve in the cicatrix, and for some weeks passed a galvanic current through the body, with one pole on the posterior tender spot and the other over the one in front. Miss X. was for two or three months much relieved by this, and grew better when a tonic mixture of iron, quinine, and strychnia was given. The treatment was interrupted for a short time by a slight attack of acute articular rheumatism in the left foot and ankle. This yielded readily to salicylates, but returned in a less degree once or twice afterward. For a time cannabis indica tincture at night helped her to sleep, but did no permanent good.

Throughout a summer in the country her condition varied, but in October she was decidedly worse—more pain, more mental and physical disability, and, finally, repeated violent neuralgic headaches. The fact that there might be a pressure on a nerve, and possibly on the bowel, from the cicatrix of the old wound again occurred to me. There was possibly, also, nephritic trouble suspected. In order to determine the facts, a careful examination under ether was advised.

Early in October, 1887, with the assistance of Dr. J. K. Mitchell, I etherized and examined Miss X. with great care. I found the uterus small, the in-

ternal measurements two and one-quarter inches; normal position; freely movable; the posterior wall somewhat thickened. On each side of the uterus a distinct tumor was found about the size of an English walnut. That upon the left side was movable independently of the uterus, and was thought to be the knobbed end of the stump resulting from the previous operation of Dr. Goodell. That upon the right side moved strictly with the uterus and was thought to be a uterine myoma. No other lesion was found in the pelvis. There was nothing detectable in the abdomen in connection with the left kidney, in front of and behind which the chief pain was complained of.

In view of the extremely wretched condition of the patient an exploratory operation was advised.

Operation November 9, 1887. Drs. J. K. Mitchell and W. J. Taylor assisting. An incision was made in the middle line, five inches in length, from the pubes upward. As soon as the peritoneal cavity was opened the uterus came into view and the two tumors above described were immediately recognized. They were so intimately incorporated with the body of the uterus that it seemed hopeless to attempt to remove them separately. In view, also, of the other additional myomata now discovered, and described later with the specimen, it seemed to be the more unwise to leave the uterus in place; accordingly, a Kœberle serre-nœud was applied to the cervix, and the body of the uterus, with its attached tumors, after separation from the peritoneum, was removed by the scissors, the lateral attachments having been first ligated. The peritoneum was now stitched over the stump. Before removing the uterus a careful search had been made in the left hypochondrium, but nothing abnormal was found. The abdominal wound was now closed, first, by a continuous suture to the peritoneum, and next, by a row of stitches passing through the rest of the abdominal wall. The clamp was separated from the skin by small pads of sublimate dressing on each side, and a large sublimate dressing and a flannel binder were applied.

Dr. George Dock kindly examined the specimen, and reported as follows:

"The specimen consists of the body of the uterus with 3.5 cm. of the right Fallopian tube and corresponding parts of the round and the broad ligaments, and 1 cm. of the left Fallopian tube, the round and the broad ligaments on that side being cut off close to the uterus and the tumors described below. The remains of the ovarian ligaments cannot be made out.

"The fundus is of an average size (nullipara) and appears to be cut off just below the internal os. The anterior surface is of normal curve. About the middle of the right border is a subserous fibromyoma, the size of a small bean. The posterior surface bulges excessively, the projection being due to the presence of a mural fibroid tumor which makes up most of the bulk of that part of the organ. The cavity of the uterus (fundus) is flat from before backward, and is triangular in outline, the opening of the tubes being in the two upper angles, the os internum in the lower. The sides of the angles measure: Right, 27 mm.; left, 22 mm.; upper, 25 mm. The right upper angle is at a higher level than the left, the wall of the uterus being relatively thinner on that side. The surface of the cavity is smooth, and presents three small polypoid growths, two on the anterior, one on the posterior surface. The anterior wall is 8 mm. in thickness, the posterior 2 cm.

"The tubes show nothing abnormal. To the right of the fundus in front of its transverse axis and 1 cm. below the level of the insertion of the round ligament, is a tumor the size of a walnut (36x26x26 mm.). It lies in the angle formed by the broad ligament and the uterus, close to the latter, being separated by loose connective tissue and bloodvessels. It is covered by peritoneum, the greater part of which is that forming the anterior fold of the broad ligament.

"The surface of this tumor is irregular. On section it is hard, creaks under the knife, the cut surface is dark gray in color. Around the periphery are whitish fibrous masses and extreme calcification.

"Microscopic examination of this growth shows it to be a myoma which has undergone partial necrosis, with pigmentation and calcification.

"To the left of the fundus, behind the transverse axis, is another tumor, slightly smaller than the one just described (33x26x28 mm.) Its upper surface is on a level with the fundus. Its nodular surface is covered with peritoneum, and it is separated from the uterus at a distance of 5 mm. by loose connective tissue in which lie two smaller tumors. On section it shows a lobular structure of firm white tissue (fibromyoma). In the upper part are masses of hard, calcareous matter (calcium carbonate). The two smaller tumors in the connective tissue are myomata."

For the next three days the patient complained greatly of pain, which was relieved by considerable doses of morphia. It should, however, here be stated that she bore pain badly. Her highest temperature was 99.7° F., and the normal was reached at the end of the third day. At this time, of her own accord, she declined any further morphia. The catheter had to be used for the first three days. With the exception of a rather obstinate constipation, which caused considerable abdominal pain and sleeplessness, which last was relieved by cannabis indica, her latter history was uneventful, saving in one particular. The wire was tightened to the utmost limit in the course of the week after the operation, but the stump did not slough nor did the clamp become loose. As the clamp was producing ulceration of the skin, it was removed December 2d. The wound, at this time, was reduced to a tubular sinus leading down to the stump. The last slough from the stump did not come away until December 26th, and the wound was completely healed January 6, 1888.

Since that date the patient has been absolutely well, physically and mentally. She eats and sleeps well, and takes active exercise with more satisfaction than at any time during the last twelve years; in fact, she is thoroughly restored to good health.

To complete her history, I will add the examination of her eyes by Dr. De Schweinitz, "oval disks; rather too gray; retinal haze, both venous and arterial; lymph sheaths distended. This low grade of retinal disturbance is, I think, purely accommodative. There is a high degree of insufficiency of the internal recti." He prescribed the proper glasses.

Remarks.—The removal of the ovaries by Dr. Goodell, which was done *per vaginam*, was one of the earliest of such operations done in this country. It reflects no little credit upon the skill, that in so contracted a vagina he was able so successfully to remove the ovaries. Although this operation relieved her temporarily from pain, it proved of no permanent benefit. Her pains returned, and though located differently, grew worse and worse, so that, finally, all mental exertion and all physical exertion as well, became greatly hampered. In fact, writing, which was her vocation, became impossible. She was willing to undergo any operation whatsoever which held out any chance of relief. She preferred to die rather than to live in such wretchedness.

The diagnosis was very obscure. What the meaning of the pain in the hypochondrium was, I could only surmise. The two tumors on each side of the uterus were believed to be, one a uterine myoma, and the other, an enlargement on the stump following Dr. Goodell's operation.

An examination of the specimen shows, as to the first, that I was right. But no enlargement had taken place on the pedicle on the left side; the tumor being one of a number of myomata developed in connection with the uterus. Its situation at the cornu uteri very naturally misled me.

No other operation than hysterectomy would, I think, have been advisable. Its performance was easy; and its results have been perfect.

Why the removal of the uterus, with its attached myomata, should get rid of pain in the hypochondrium I am unable to say. To say that it was reflex pain is simply to express our ignorance in different words. Certain it is, however, that the removal of the entire internal

organs of generation have been followed with the happiest results, whereas, the removal of the ovaries alone gave but little relief.

I have deemed it important to report the case in consequence of the recent question as to the results of complete and incomplete removal of the tubes with the possibility of the development of tumors on the stumps after incomplete removal of the tubes. My first impression upon examining the specimen itself, was that the two tumors were such knobby stumps, but after section and microscopic examination by Dr. Dock, this impression was seen to be erroneous.

Selected Articles.

ON THE PREVENTION OF BLINDNESS BY THE OPHTHALMIA OF THE NEW-BORN.*

BY SIMEON SNELL.

OPHTHALMIC SURGEON TO THE SHEFFIELD GENERAL INFIRMARY.†

The census of 1881 gave the number of blind persons in England and Wales as 22,832, being in the proportion of one blind person in every 1138. It is satisfactory to note the census of 1851 showed a marked improvement in the ratio of blindness to that of 1851. In the latter year one in every 979 was returned as blind, and if the proportions had remained the same at the last census the number of blind persons would have been 26,523, instead of 22,832, as the census gives it. This may be fairly considered to have resulted in a great measure from our increased knowledge of eye diseases and improved means of treatment. When, however, it is remembered that a large proportion of these cases of blindness are caused by the ophthalmia of the new-born, which, if properly treated, is curable, and that it is from ignorance and neglect that loss of eyesight has resulted, we should look forward to attaining a greatly reduced proportion of blind people. Somewhere about 30 per cent. of all cases of blindness are estimated as due to this one cause alone. This would give a number of about 7000 out of the total 22,832 returned as blind in the census of 1881 whose blindness is attributable to ophthalmia neonatorum. This is by no means a high proportion. Some authorities give a larger percentage. My own statistics are higher, and I will briefly refer to them.

Since the opening of the Sheffield School for the Blind I have kept records of all the children admitted. In a report on the cause of blindness of the inmates of this institution, as well as the blind *employés* at the workshops,‡ I gave the number of children then at the Blind School as seventy-six. Three were excluded from calculation as not having been seen by me or for some other cause, and the number was thus reduced to seventy-three. In no fewer than twenty-seven of these could the blindness with tolerable certainty be assigned to ophthalmia neonatorum as the cause, and one additional case in all probability so, making a total of twenty-eight, or 38·3 per cent. Since this time up to the close of 1887 twenty new cases have been admitted into the school; in nine of these the blindness is clearly traceable to the same cause. This makes a total of ninety-three children, with one or two exceptions all are under fifteen years of age, and no fewer than thirty-seven owe their blindness to ophthalmia neonatorum, or 39·7 per cent. At the time of my report, forty-six blind people were employed at the workshops. Eight of these were already accounted for at the Blind School, reducing the number to thirty-eight. Ten of these became blind through ophthalmia neonatorum, or 26·3 per cent. The smaller percentage in the adults is to be readily accounted for. There were twenty-nine men and nine women. Both sexes would include instances of blindness from causes which more or less only have effect after childhood. But men are much more exposed to accidents—which accounts for several cases of blindness in those now under

*Read before the Yorkshire Branch of the British Medical Association, at Wakefield, Feb. 22nd, 1888.
†*The Lancet*, Sept. 1st, 1888.

‡Brit. Med. Jour., vol. i. 1886, p. 387.

consideration, and other causes—than are women. The statistics mentioned only refer to those unfortunates who have lost the sight of both eyes. What means have we of calculating the larger numbers of those who are blinded in one eye only, or who have had one or both organs more or less damaged by the disease? The object of this paper is not to discuss the treatment of the disease, but rather to refer to the means by which the ravages caused by it may be lessened, if not obviated.

1. Can the disease be prevented, and by what means? Credé showed in 1881 how the affection was rare among the upper classes, but common among the poor, and was the scourge of lying-in institutions. He entertained no doubt that it resulted during delivery by inoculation with the maternal secretions. Vaginal injections of carbolic or salicylic acid were used before and at the time of delivery; but this served only to diminish, not abolish, the disease. Attention was then directed to cleansing the eye, and, after employing borax, a 2 per cent. solution of nitrate of silver dropped into the eye immediately after birth was arrived at as the most satisfactory application. The results were as good without as with vaginal injections, and these were therefore discontinued as unnecessary. Credé gives statistics: 13 per cent. before fell to 1 per cent. after the adoption of the method described, and better results have, I believe, since been obtained. Others also have lent support to the efficacy of this method, showing that it is practically an absolute preventive of ophthalmia. The nitrate of silver acts as a specific against the gonococcus.

I was aware some little time since of a simple preventive plan which had been carried out in the midwifery department of the Jessop Hospital for Women, Sheffield, with signal success. I am indebted to J. M. Willey, the house surgeon, for kindly supplying me with the following particulars. The patients are among the poorest; some are inmates of the hospital, but the great majority are confined at their homes. The midwives have received instructions that immediately the head of the child is born attention must be directed to the baby's eyes. Then, with little pieces of lint moistened in clean tepid water, the eyes are carefully washed, as well as the eyelids and parts close adjoining. Subsequently, in washing the child, care is taken to guard against re-infection. During the last three years there have been 2242 labours among the in-patients and out-patients. In the first 200 there were a few cases of purulent ophthalmia, but in the last 2000, since the method has been systematically adopted, not a single case has occurred. Directions were also given to nurses that if a child's eyes looked any way red, it was to be taken at once to the hospital for a drop of nitrate of silver solution (five grains to the ounce), to be dropped into the eye. This has very seldom been required, and, as stated, in no instance in the last 2000 labours has a case of ophthalmia occurred. This plan is remarkably simple, and the absence of any application, such as nitrate of silver, to the eyes renders it very easy of adoption by nurses and midwives. The success which has attended its use at the Jessop Hospital renders its worthy of more extended employment. Its success clearly depends on washing away secretions from and near the eyes before the child has opened them, and before infection has taken place. Strong evidence is thus afforded against the opinion often held, that it is whilst in the maternal passages that infection occurs. This is a point of much moment in the adoption of preventive means against the disease. A recent article by Dr. Ludwig Korn,§ "On the Prevention of the Blennorrnœa of the Newly Born," is very interesting, because he discusses this question, but especially as he was led to adopt very similar preventive measures to those I have described as being in use at the Jessop Hospital. His experience was gained at the Dresden Clinic for Women. "The method employed was the following. Every woman in labour was carefully cleansed. When possible they were put into a warm bath. After the hair on the genital organs had

§Archiv f. Gynæcologie. Translation in American Journal of Ophthalmology for November, 1887.

been clipped, the external parts were washed with soap and irrigated with a solution of bichloride of mercury, 1 in 1000. The vagina was washed out according to Kaltenbach's method with a solution of bichloride, 1 in 5000. In every case which appeared to be suspicious of blennorrhœa I rubbed the mucous membrane of the vagina and cervix with my finger, while the irrigation was made as Cohn recommended. During parturition these irrigations were repeated several times, before and after every digital examination. As soon as the head was born, the eyelids and the portions surrounding the eyes were scrupulously cleansed by means of cotton soaked in hydrant water. And especially all the smegma was removed. We rubbed the cotton from the outer to the inner canthus, continually using fresh pledgets of cotton until the lids were perfectly clean. We particularly tried to prevent any opening of the eyes before this cleansing process was finished." The results were very good. He thought it seemed evident that thus the eyes could not be infected while the child passed through the vagina. The sublimate solution for cleansing the vagina was reduced in strength, and it was only used before and after digital examination. When no examination was made, no sublimate solution was used. In such cases as this, nitrate of silver was formerly dropped into the eye. But, since it was supposed that infection did not take place during the passage of the child, it was no longer used. In all cases, however, every baby born in the institution was washed with simple water as described, without paying any regard to the previous cleansing of the parturient mother. The results were excellent. Three cases of ophthalmia only occurred in 1000 cases; one in the last 700, and not one in the last 420.

2. Cannot something be done to diffuse information as to the curability of the disease, and to enforce the necessity for immediate treatment in those cases in which it has occurred? Dr. David McKeown brought before the Ophthalmological Society, in 1884, a very well elaborated scheme with such an object. He proposed to utilise the Poor-law and birth-rigistration organisations. The Society adopted with slight modifications these suggestions, and communications were opened with the authorities, and, leading to no result, a deputation waited on the Local Government Board. I am not aware that in England any steps have been taken by the authorities. In Ireland, however, the importance of the matter was brought before the Poor-law medical officers, and also the midwives. But in the absence of such an elaborate scheme much can be done in simpler ways. The Society for the Prevention of Blindness has issued a leaflet entitled "Advice to Mothers who do not wish their Children to be Blind." Other societies have done something as well. To the parents or friends of babies brought to the Sheffield General Infirmary we are not only now giving directions as to the serious nature of the disease, the need for the early treatment which has been too often neglected, and the safety of eyes imperilled or sight lost; but we give them a card which enforces these points, and which they are desired to preserve. The card has very similar but somewhat more brief directions to those suggested by the committee of the Ophthalmological Society (Dr. McKeown's), and it reads as follows: "If a baby's eyes run with matter and look red a few days after birth, take it *at once* to a doctor. *Delay* is *dangerous*, and one or both eyes may be destroyed if *not treated* immediately." Dr. Bell has succeeded in securing the voluntary assistance of the registration officers in Bradford, and in this way a slip with somewhat similar instructions to those just mentioned is given attached to the certificate when a birth is registered. This excellent plan may well be imitated. I tried, moreover, some little time since, to obtain the assistance of the St. John Ambulance Association, with its extensive organisation, for the diffusion of knowledge respecting the gravity of this affection. I am sorry I did not succeed; perhaps some one else may do so. There are other ways in which by degrees information may be scattered, and in the end bear fruit; but, in con-

clusion, I would point out the great help which teachers of obstetrics can render by enforcing on their classes the two lessons this paper has attempted to set forth—viz., (1) That the disease is preventable by the adoption of simple measures; and (2) when it does occur, it yields to treatment if not delayed. To writers of text-books the opportunity and duty are equally great, if not greater, as are also those pertaining to the teaching of midwives.

Correspondence.

LETTER FROM EDINBURGH.

EDINBURGH, AUGUST 11TH, 1888.

Editor of Maryland Medical Journal:

DEAR SIR:—I wrote to you from London and Paris, and as I am in a scribbling mood, I will send you a few lines from this place. You will probably remember my promise to write to you again.

I left Paris on Aug. 3rd., spent two days in London to rest, and then went direct to Glasgow to attend the meeting of the British Medical Association. I had previously attended these meetings in Cardiff, Wales, (where I was made a member of the Association), and in Brighton; so I did not feel myself a stranger there. I met many old acquaintances who gave me a hearty welcome.

From 1,200 to 1,500 physicians were in attendance from all parts of the British Empire. All the meetings—general and sectional—were held in the buildings of the University of Glasgow, and the accommodations were ample. The first day was devoted to general meetings. The Association met at 11 A. M. Aug. 7th. At this meeting all the general business of the past and coming year, was transacted. On entering I found a number of American friends present. Drs. Barker, Janvrin and Jacobi, of New York, Dr. Parvin, of Philadelphia, Drs. Taber Johnson, Ober, and Bromwell, of Washington, and Dr. Davis, of Chicago. There were most cordial greetings amongst us. At night their was a very large general meeting when the President's address was delivered.

The sections got to work on the following day. There were two general meetings every day, at which addresses on general medicine and surgery were delivered, but all of my interest centred in Gynecology and Obstetrics, and in this section all of my time was spent. It met at 10 o'clock every morning. At the opening meeting Dr. Fordyce Barker and I were honored, by being invited by the President—Dr. T. More Madden, of Dublin—to sit, the one on his right hand and the other on his left. The room was filled with many of the best men in Great Britain and its colonies. Dr. Apostoli of Paris was present. America alone, of all foreign countries, was honored in having two of her citizens seated by the President, and Americans were prominent in the debates which followed. The president delivered an able address.

The first paper read was by Professor Alexander Simpson, of Edinburgh, on "Intra-Uterine Death; its Pathology and Preventive Treatment." It was a very able production—particularly the pathological part. It was listened to with undivided attention and received with great applause.

Dr. Robert Barnes, of London, opened the debate; followed by Drs. Edis, Aveling, Parvin, Fordyce Barker, H. P. C. Wilson, Lawrence, Byers, and T. More Madden.

Dr. Samuel Sloan, of Glasgow, read a paper on his Antero-posterior Compression Forceps in Flat Pelves. Dr. A. Routh read one on "Headaches of Pelvic Origin," and Dr. Wm. Stephenson of Aberdeen, one on the "Influence of Permanganate of Potash on Menstruation;" but the great debate of the day was on Professor Simpson's paper.

The second day's proceedings were opened with a paper by Dr. Halliday Croom on Obstructive Dysmenorhœa and Sterility. It was long and ably discussed by very many of the gentlemen present and the views presented were as

many and varried as the speakers. This is evidently yet an open question. Among those who spoke were Drs. Aveling, Robert Barnes, Imlach, Edis and T. More Madden.

I was glad to hear that Dr. Robert Barnes agreed with me, that in this condition of things, with properly selected cases, nothing equaled a judicious use of the knife;—in other words—"Division of the Cervix." This is the point for which I have been struggling,against great odds, in my own country; and after an experience of between four and five hundred operations for this trouble, and the liberal use of all other plans recommended, I am convinced that this operation will cure more cases of "Dysmenorhœa and Sterility" than all other means combined, and will cure them with very much less danger and suffering to the patient.

The number ot uterine dilators presented were as numerous as those to be seen in our own country. In these days it seems that every obstetrician must invent a pair of forceps, and every gynecologyst a uterine dilator. "There is safety in numbers." Many other valuable papers were read in this section by distinguished gentlemen but there is a "limit to time and space."

The entertainments were extensive, converzationes, garden parties, private dinners, excursions, and a general dinner by subscription, (21 shillings with wine, 14 shillings without wine.)

These were all charming, but I must hurry away to Loch Loman, Loch Katrine, the Trossachs, Stirling Castle, and this most beautiful of all cities, where the whole atmosphere is pregnant with the inspiration of Sir Walter Scott, and the shadow of Queen Mary flits ever before you.

I shall sail from Liverpool on the Umbria Sept. 1st.

Faithfully yours,

H. P. C. Wilson.

Prof. to medical student—"How would you treat post-partum hemorrhage?" Student—"I would tie the post-partum artery." That student is now carrying a hod.

REPLY TO A REVIEW OF THE RELATION TO ALIMENTATION AND DISEASE. BY J. H. SALISBURY, M. D., LL. D., NEW YORK. J. H. VAIL & CO., IN THE MARYLAND MEDICAL JOURNAL, 1888.

Editor Maryland Medical Journal:

The bright, the witty, the brilliant, the popular, the remarkably successful, the honored cosmopolitan and Yale graduate of 1856, the Hon. Chauncey M. Depew, LL. D., has won laurels as a speaker at public dinners of every sort and possesses a wonderful tact in managing men. I once saw him reduce a company of Columbia College boys, aged about 18, who disturbed by their gaiety a Yale alumni meeting (of which he was the President) by giving them a reception before the alumni and making them a nice speech. The graceful delivery, the keen wit, and the appropriateness to the occasion which was entirely impromptu, completly won the hearts of the boys and they went off feeling very happy and disturbed no more. Most any one else but Depew would have simply ordered them off.

Mr. Depew was once asked by a mutual friend the secret of his success, in his after dinner speeches. He said that he made friends by abusing them roundly and afterwards retracting, that folks generally needed a sound rating to make them friendly. To be sure he did not abuse the Columbia boys as he wanted to be rid of them. But it seems to me the critic of the work aforesaid might be trying to imitate the great example of the most famous "diner out" in New York, when he called it "rubbish" and "nonsense," if it is so I thank the critic. But if he means what he says I beg to meet him on his own grounds. About 25 years ago my father, an eminent physician, died of thrombosis of the heart. There were two thrombi, one in the aorta and one in the pulmonary artery. Both rose from the auriculo-ventricular valves, both were about 8 inches long. He had had "trip hammer" pulsations, dyspnœa, &c. At the time of the death

I could get no light as to the ætiology of these thrombi.

I had been to London and seen Dr. B. W. Richardson, who wrote on the subject. He could not explain. I had been to Washington and seen Dr. J. J. Woodward, afterwards the President of the American Medical Association, although he knew thoroughly the medical library at Washington, and he could not give me light. Indeed finding that my own library was richer in one of Dr. B. W. Richardson's works, I gave it to him for the library. The matter was one of terrible personal interest to me as my father told me that most of his family died of heart disease about the age of 60. As I had devoted my life in the profession, to finding out the causes of disease, I was not satisfied ere I came across the work in which was detailed the autopsies of 104 swine that had died of improper feeding on sour food. Out of the 104 cases 103 had thrombosis with trip hammer pulsations, like my father's. Now our critic calls this "rubbish and nonsense." I was brought up in Boston under the most agnostic medical professors I ever saw, but I never knew them to go back on one postmortem much less 104. Further I went to Philadelphia and studied the heart under the late eminent Dr. W. W. Gerhard. I learned all I could about the diagnosis and treatment of diseases of the heart including the "tobacco heart," but I never cured a case of hypertrophy of the heart or valvular lesion before I did it by proper feeding as taught by Dr. Salisbury. Is this rubbish and nonsense?

Again, having had consumption of the bowels in infancy and more or less ever since, I sought to thoroughly understand its causes. Those who know me, if they don't endorse me, will say that I have tried to study medicine on the practical side diligently, but I never got any peace with my intestines until I got it out of the "rubbish and nonsense" of our critic. I am grateful to our author for giving me a new lease of life. I have urged him to publish the work in question, that this disease for once might be understood and cured. I have cured such cases of 19 years' standing. Is it "rubbish and nonsense" to do this? We quote further: "A pseudoscientist generally succeeds in imposing on his patients, particularly if he claims to recognise 68 or more pathological conditions by a microscopical examination of the blood." Reply. This grieves me. In my own family and connections many have died for a want of knowing and appreciating this very list of morphologies of the blood. Loved ones, ones precious, have been laid in their graves, snatched away from their families and their usefulness prematurely for want of knowing the truth as to their complaints. How do I know it? Reply. I have taken cases, the physical signs of which bore out the diagnosis of consumption and cured them. See transactions Am. Med. Asso., 1880.

Again I have found the use of the microscope on the blood invaluable in the diagnosis of consumption before the lungs were broken down.

I have endeavored to use the highest and best objectives I could find even the 1-75th inch objective and am the first to have photographed the morphology of consumptive blood with the highest powers successfully used in microphotography. I feel that I have a right to speak when such work is called "rubbish and nonsense."

I tell you, sir, the business of the physician is to cure disease; no matter how brilliant, how well received, no physician's work is complete unless he cures. Dr. Salisbury cures and has taught me to cure, hence I can't deem his work "nonsense and rubbish." So long as our critic has never thrown any light on causing or curing thrombolism nor consumption of the bowels, or consumption of the lung, and Dr. S. has, and so long as I want to live out my appointed days on the earth I see no other way for me, after twenty years careful study of the work, and after practical demonstrations of great value that I know of, to accept nothing for something, chaff for wheat, death for life.

To be more direct, suppose you, my critic, had consumption of the bowels or consumption of the lungs, for example, would you rather die than get well if

you had to do it by the Salisbury plans? And yet this is the logical outcome to any one who reads your criticism. I ask you, have you ever made any blood examinations after our author's plan? Have you ever seen the blood clear up and assume its normal condition? The sputum get rid of the lung fibers from the necrosis? The half paralysed thorax resume its normal shape and the patient restored to health on the Salisbury plans? Reply. I have.

Again we quote: "This book is no honor to the publisher." Reply. About three years ago a middle aged man came into my office from an adjoining city saying that he was told he had cirrhosis of the liver. He looked sick. Icteroid, legs and angles swelled, belly dropsical, heart enlarged, sounds weak and muffled, breath short, panting, countenance devoid of hope. Generally the case looked grave, the urine was albuminous, bilious, contained casts of the kidney tubes, fatty epithelia. The liver was dull in percussion and hard like a rock. He was so feeble that a kind gentlemen came with him for fear he might die on the road. The man went on the treatment laid down in this book of "no honor to the publishers." What is the result today? Answer. He lives in the enjoyment of health. The custodian has died, though apparently well at the time he came with his sick friend.

Is it a dishonor to me to have cured this case? If so I welcome the shame. Sometime it may be different. Once the cross of Christ was a shame, now it is a deathless glory.

Again, about three years ago a woman came to me with a fibriod tumor growing out of the top of her womb about as large as the closed first of a man. She went on the plan laid down in the book in question. The tumor disappeared in a month.

Again, four years ago another woman came with a like fibroid only three times as large. It was complicated with anteversion and double inguinal hernia. I saw her last fall. The tumor had entirely disappeared. Again, about three and a half years ago a man was brought to me by his father-in-law, a physician, as a case of Bright's disease incurable. He had albumen, casts of the kidney tubes, fatty epithelia and fat in the white blood corpuscles. He went on treatment. Result today entire cure.

The principles of the treatment in these cases and many others like them were laid down by the author of this book which our critic says is no honor to the publishers. Facts are not with this dictum.

POSTLUDE.

History paralels our critic in other things. The Brooklyn bridge, the Cantlever bridge, ocean steam navigation, ocean telegraph, vaccination, cold water in fevers, electrolysis of uterine fibroids, Central Pacific railroad, the great trees of Calafornia, to name no more all met with like criticism. The facts in these cases were greater than opinions. Words are cheap and work is dear. Now in the present case where it is possible that the very life of our critic depends on a knowledge that he seems so disgusted with, it must be insisted that judgement must be in accord with the facts in evidence. I have testified as a witness to what I know to be the truth and could testify all day in the same direction. But I have only to ask our honorable critic to go and live on baked beans for sixteen days and then write his review, or to live on vinegar for eight days and then write his review; or to live on army biscuit and then write his review. I am willing to bide the test. I wish he would feed 1000 swine on sour swill for three months and make postmortems of all the dead and then write his report. I wish he would examine the morphology of 100 consumptives blood after the Salisbury plans as he would hunt for the bacillus of Koch and then write his report.

I may have made mistakes, and who does not? Daniel Webster said he would not give a cent for a man that never made a mistake; but I know that I make fewer mistakes than I did simply because I have studied with the light shed on medicine by the mass of evidence which our critic has set down on.

The great question is how to cure the

sick. Individuals, myself included, are nothing in comparison with this. If any physician knows, or thinks he knows, any thing that will cure more sick people he is bound to let it be known. "A capacity to do good not only gives a title to it but makes the doing of it a duty."—Duke of Brandenburgh, 1690.

EPHRAIM CUTTER.

1730 Broadway, N. Y.
Sept. 3, 1888.

Reviews, Books and Pamphlets.

The Best Surgical Dressing: How to prepare it and how to use it; with a consideration of Beach's Principle of Bullet Wound Treatment. By OTIS K. NEWELL, M. D., Assistant Demonstrator of Anatomy at Harvard Medical School, Surgeon to Out-Patients at the Mass. General Hospital, etc. Boston, Cupples & Heard, 12 mo. 1888. Pp. 179. Price $1.00.

The "best surgical dressing" consists of iodoform *properly used*, which the author learned to use in the Massachusetts General Hospital and in Billroth's Clinic. He quotes from Professor Wölfler's address on the "Progress of Surgery in the last Decennium," delivered before the Society of Physicians at Grotz on the 26th November, 1887: "A strip of iodoform gauze, a wood-wool sac, and a bandage over this, is all that I use for any wound at my clinic." The iodoform is no longer used in bulk as formerly and the author states that with the plain or adhesive gauze as made by Mikulicz, there is no odor. A square yard of the gauze is sufficient for from twenty to fifty dressings. The author claims for Dr. Beach of the Mass. General Hospital, priority over Mikulicz on the use of iodoform in bullet-wounds, and he also claims for him the establishment of the principle: "Never disturb a bullet-wound unless there are positive indications of the necessity of so doing. A bullet entering the body in the usual manner is as harmless as a tooth filling and soon becomes encysted." "Perforation of the intestine with escape of fecal contents or hemorrhage, for example, would necessitate immediate interference." "Probing for the ball" is, therefore, a practice to be condemned. The great bulk of the volume is taken up with a translation of Mikulicz article from the *Wiener Klinik*, of 1882, and with the report of cases illustrating the let alone antiseptic treatment of gun shot wounds.

A New Way of Training Nurses. By A. WORCESTER, A. M., M. D., Fellow of the Massachusetts Medical Society, Physician to the Waltham Hospital. Boston, Cupples & Heard. 12 mo. 1888. Price 50 cts.

This interesting little volume of 118 pages contains, besides matter of interest in connection with nursing generally, an account of a successful effort to supply trained nurses in a country village. It shows how to set about organizing a training school for nurses remote from hospitals, and it solves Dr. Gross' ideas on the subject, proposed several years ago, and which at that time seemed to us quite impracticable. *Wherever an energetic and determined physician can be found to carry out the plan proposed in this book, it is possible to institute a similar school to that at Waltham, and to secure for the community the benefits of trained and skilful nurses.* But the work is in the highest degree interesting to all physicians, and we commend its perusal to those concerned in the Baltimore Training School conducted under the auspices of the Woman's Medical College of Baltimore.

Abdominal Surgery. By HAL C. WYMAN, M, D., Prof. of Surgery and Operative Surgery, Mich. Col. of Med. and Surgery. Small 8 vo. Pp. 83. George S. Davis, Publisher, Detroit, 1888. Price 25 cts.

This is one of the Physician's Leisure Library Series, issued monthly, and its purpose is to aid students and practitioners in the elementary study of abdominal surgery by a plain presentation of facts, examples and results "as they have come under the author's notice." The subject is one with the details of which all physicians should familiarize themselves. In the absence of a clinical

field which is only available in large centres of population, the author suggests that the dog will afford the needed material and he proceeds to give the needed directions for experimentation on them. All the possible operations upon the abdominal organs are traced out on this animal. The author disclaims being a crank and recommends abdominal surgery only as a "last resort," but one which may present itself to any member of the profession, at any moment.

Some of the Advantages of the Union of Medical School and University. An Address delivered at Yale University, June 26th, 1888. By WILLIAM H. WELCH, M D., Professor of Pathology in Johns Hopkins University. Pp. 19, 8vo.

It is not a mere formal connection for which Prof. Welsch contends. There must be a union in spirit as well as in name. The influence of university methods and ideas must manifest themselves in the medical department, sympathetic relations must exist with other departments through the connecting link of all, the philosophical Faculty, and the co-operation must be obtained of those physical and natural sciences—physics, chemistry, zoology, comparative anatomy, and botony, knowledge of which is essential to a complete medical education and to scientific research in every branch of medicine. The necessity of scientific training may be illustrated by a reference to physiology, for instance. Physiology is in large part the application of physics and chemistry to the explanation and investigation of the bodily functions in health; to the employment of physical and chemical methods physiology owes its position as the most exact of the medical sciences. The vivifying influence of this intimate connection between medical study and the university has already made itself manifest in zeal for research, equipment of laboratories, improved methods of instruction, and a mere orderly and systematic scheme of study, including a preliminary medical course. Not the least of the causes of German preëminence in medical education is the fact that medicine in Germany is taught only as a department of a University, while the backward position of physiology in France is attributed by so high an authority as Du Bois Reymond to the isolation of the School of Medicine of Paris and the secondary position occupied by physics and chemistry there. The value of a well equipped hygienic laboratory is illustrated by a reference to Munich where so much has been accomplished under Petténkofer for local sanitation, that the professor of pathology here complains that he is no longer able to demonstrate to the student the lesions of typhoid fever.

Prof. Welch well says that the defective organization and the independent character of most of our medical schools are accountable for the rarity of medical endowments. And in reference to the subject of endowment, we are glad to have the views expressed so earnestly in this journal upon their *vital importance* to medical education almost literally reproduced by him in the following extract from his address:

"There is no department of higher education which today in this country stands so much in need of pecuniary endowments as that of medicine. The relation of medical education to the public welfare renders especially urgent its claims in this regard. A system of medical education in accordance with modern ideas and adapted to present demands cannot be maintained without endowment or state aid. More is required than didactic and clinical lectures and the simple appliances of former times. There is need of thoroughly equipped. laboratories, which, if properly conducted, cannot be made self-supporting. In most of the German universities nearly three times as much money is paid for the support of the laboratories required by the medical faculty as is given in salaries to the medical professors. The medical school must be lifted above the necessity of obtaining its means of existence solely from the fees of students, if a higher standard of education is to be attained. At present it would be suicidal for and unendowed medical school to adopt an ideal course

of medical instruction. Under present conditions such a school is likely to make its requirements no higher than is demanded by the students themselves. The manifold benefits which I have attempted in part to depict as resulting from the union of medical school and university cannot be secured to any appreciable degree without endowment."

Cocaine Dosage and Additcion.—Cocaine Texœmia. By J. B. Mattison, M.D., Brooklyn. Pmpht., 1888. 8vo. Pp. 44.

Dr. Mattison has collected more than 120 cases in which toxic symptoms more or less profound were produced. Their details are here given. In seven cases death has been attributed directly to the agent, including the case which led the unfortunate Russian surgeon who administered it, in a moment of remorse to take his own life. Dr. M. proves, moreover, that the danger of the cocaine habit is quite as real as that due to opium and alcohol. It can no longer be denied, after this mountain of testimony, that the physician assumes a grave responsibility in administering this drug. The antidotes, according to Dr. M. are nitrite of amyl and morphine hypodermatically. This is an important and valuable contribution.

Report of Yale Observatory for 1887–8.

The physician will chiefly be interested in that part relating to thermometers. The improvement in the accuracy of clinical thermometers presented for testing continues. The number of thermometers examined for the year ending June 1st, was 7,236; during eight years 43,727.

Quackery vs. Regular Practice.—An instructive story, illustrating the preference of the public (at least in France) for quackery over science, is just now going the round of the French medical press. A provincial magistrate having received numerous complaints that a certain Monsieur L—— was practising medicine illegally, sent for him and interrogated him as to the truth of the reports. To his surprise, the quack fully admitted the fact that he practised, but declared that he was only acting within his rights, being a Doctor of Medicine of the Faculty of Paris, and produced from his pocket his diploma, which was perfectly regular. On being asked why he had concealed the fact of his properly qualified right and posed as a quack, he explained that he had done well as a student, and that having attracted the notice of some of the professors, he was encouraged to set up in practice in Paris. Although a few patients came, he was unable to pay his way, having expended all he had saved in the fees necessary for his diploma, &c. He left Paris in despair, and went on board a cod-fishing boat. In this way he earned a few hundred francs and returned to France, determined to give up medicine and to follow business for a livelihood. He found, however, from time to time opportunities of attending patients, but did not tell them he was a doctor. His fame spread, and he had been making a good income for the last ten years, during which time he had saved and invested about 10,000 francs. He was so convinced of the superiority of the position of a quack over that of a medical man, that he begged the magistrate to keep his secret; for he was positive that if it leaked out that he was a qualified man he would lose all his practice.—*Lancet.*

Gastrostomy.—Dr. Miles F. Porter, of Fort Wayne, Ind., reports in the *Journal of the Amer. Med. Association*, July 30, 1888, the details of a very interesting case in which he performed the operation of gastrostomy upon a young man, 19 years old, who had a stricture of the œsophagus in consequence of drinking some caustic liquid. The operation was conducted in two "times," the first comprising the opening of the abdomen and securing to the edges of the wound a portion of the stomach; the second consisted in making an opening into the stomach. Between these two steps of the operation, the patient had a violent attack of broncho-pneumonia, which at one time led his medical attendants to despair of his life.—*Med. and Surg. Reporter.*

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Editorial.

SURGERY IN THE LAST HALF-CENTURY.—Among the admirable addresses delivered at the late meeting of the British Medical Association, that of Professor Macleod is of special interest, dealing as it does with the progress of Surgery during the period embraced in the Victorian Era. "It is fully admitted," he says, "that in every department of human knowledge our half-century has been signalized by a progress greater, more momentous, and more permanent than any other in the world's history; and in this advance medicine in all its branches has so largely and bountifully shared that even a bare recital of what has been done fires the imagination and makes the heart throb with triumph."

In the province of surgery during this period, two great events stand out prominently and deserve to rank in importance as "epoch-making;" these are the discovery of anæsthetics and of antiseptics.

Though men had sought for the means of allaying pain from the remotest period, its realization seemed as far off fifty years ago as ever and the great Velpeau had summed up the opinion then entertained in the statement: "All research for an agent to destroy pain in operations is a mere chimera and unworthy of further consideration." When the discovery at last came, it was sudden, and it excited unbounded enthusiasm and anticipations. Its effect has been to change the entire aspect of surgery; and its benefits are by no means limited to the patient but are almost equally as great for the surgeon.

Antiseptics have likewise vast power to diminish suffering and save life, and their use by promoting the study of the micro-organisms producing disease brings nearer to realization the hope of exterminating the whole class of germ diseases.

A mere enumeration of the lesser improvements and discoveries in surgery occupies considerable space, but following the author of the address we may venture to refer to the development of sanitary science, to the improved construction and organization of hospitals and other public institutions, the great advances in general and comparative anatomy and the creation of pathological anatomy, the elucidation of the phenomena of inflammation and fever, the birth of the cellular pathology, the improvements in methods of amputation, excision and resection, the invention of useful splints and apparatus, and of various instrumental aids to diagnosis and treatment as the ophthalmoscope, otoscope, laryngoscope, the sphygmograph, thermometer, endoscope, aspirator, écraseur, hypodermic syringe, electro-cautery, the discovery of skin-grafting, the introduction of nerve-stretching, osteotomy, forcible rupture of adhesions in ankylosed joints, tenotomy, of new methods of treating aneurism, of manipulation in the treatment of dislocations, of litholopaxy, of iodine injections in hydrocele and other fluid collections, of nephrotomy and nephrectomy, of colotomy, of brain-surgery, of laryngectomy, of pneumotomy and pleurotomy, of splenectomy and pylorectomy, and the many various operations upon the thoracic and abdominal organs unknown fifty years ago, the wonderful advance in our knowledge of the etiology, pathology and treatment of gonorrhœa and syphilis, the

extension of plastic surgery, the use of hot water as a hæmostatic, the recent employment of galvanism by Apostoli in uterine diseases, etc., etc.

Even such a bare enumeration, although failing to do justice to the growth of surgery, at least suffices to show "that in every branch of the surgical art there has been a wondrous advance, and that the profession to which we belong marches in the very van of the great army, recruited in all climes, whose aim it is to enlarge human knowledge."

The Physician as Student of Nature.—In his admirable and scholarly address before the British Medical Association—so full of good things happily expressed—Prof. Gairdner, the president, directs attention to the "physician as naturalist." It is a curious fact that English is the only language in which this designation is applied to medical men. The names physician and physic relate to that aspect of the practitioner which connects him with *phusis* or nature; in other words it emplies that he is among other things and above other things a *student of nature*. It is hard to discover, says Prof. Gairdner, when this idea first appeared, but it has taken strong hold on the language, so that not only is it employed to designate the healer of the sick but even the very tools of our art, practically displacing the older term—medicine. Not all the nasty stuff that has in the course of ages been poured remorselessly down the throats of long-suffering generations of men, however, deserves the title of nature's remedy or physic.

The terms physic and physician belong to a remote antiquity and are to be cherished as relating to one of its highest and noblest traditions. Hippocrates calls the medical man "the servant of nature," and this function descended with the healer until mediæval superstition and scholasticism converted him into a mere slavish fookworm and pedant and subjected anyone undertaking original reseach to imprisonment and perhaps even the faggot. It is an honorable ambition to desire to retain this traditional attitude towards the modern public, and as in remote times we have been esteemed as physicians in proportion to our acquirements as humble, reverent and exact followers and students of nature, so now we may seek to establish a similar confidence by being trained and exercised after the best manner and according to the most thorough discipline of the science of our age. This train of thought led to further reflections upon the modern training of the physician, and more particularly upon the inadequate instruction given him in natural science.

Where There are Three Doctors There are Two Atheists.—This saying, which is probably of mediæval origin, Prof. Gairdner pronounces a calumny, and as such expresses his indignation at it. If religion requires that all minds must be fashioned in the same mould, then indeed have physicians been atheists. To have been charged with atheism in the middle ages may have been far from a reproach. From the time of Socrates ignorance and bigotry have been ever ready to use it, and to have incurred it has often been a man's title to the society of those "who have kept alive the flame of the human spirit." It was inevitable that the student of nature should have incurred this reproach. The prosecution and imprisonment of Roger Bacon and Galileo and other "martyrs of science," shows the working of the blind and impracticable spirit which, under the cloak of religion, stood athwart the path of the physician for centuries. That the life and work of the physician who is worthy of his calling begets irreverence or godlessness is a mistake; the man who can ignore the questions of destiny and eternity is a social anomaly. Even in the man of pure science, the avowed agnostic, we may find one who is pervaded with the divine spirit, though in his search for the truth he refuses to bind himself by formulæ which in any way will limit the absolute impartiality of his research. Such

a man was Charles Darwin, in whom, "if his character be carefully and charitably studied we see a man of the very stuff and moral fibre of which the most eminent saints are made."

"Do not close your eyes to the life-long and unswerving devotion amid pain and physical disabilities, to the work that was given him to do; the constancy, the transparent simplicity of character, the courtesy under differences of opinion, the chivalrous self-repression in argument, the consummate sense of justice, the abiding conviction that truth (shall we not say for him, God's truth) stands far and away above the level of human passions and infirmities in expressing or defending it; above all, take note of the abounding, the almost inexhaustible charity (in the highest Christian sense of the word) of that sweetly-composed nature, whether as shown in his published works, in his correspondence, or in the sacredness of the domestic circle; and then say for yourselves in what hierarchy of canonised saints you will find many that are his superiors, or even his equals, in all of these eminently Christian virtues and graces taken together."

"The physician of the future will study the Bible in the spirit of modern scientific freedom and of historical research, not under the influence of mere tradition and ecclesiastical authority. And thus only can the reconciliation of science and religion ever be brought about."

Antidotes to Snakebite.—Dr. H. C. Yarrow, Curator of the Department of Reptiles, U. S. National Museum, has been experimenting with a number of articles which have been recommended or suggested as antidotal to the bites of venomous serpents. His conclusions are given in a series of articles published in *Forest and Stream*. They naturally attract a great deal of attention not only on account of their scientific interest but also because of their practical bearing. The result of his experience is not very encouraging. He operated with rattlesnakes only, obtaining their venom by making them strike at absorbent cotton, attached to the end of a stick, and them washing out the cotten in glycerine. The following substances were used in Dr. Yarrow's experiments: Permanganate of potassium (claimed by Lacorda as efficient in the bite of the bothrops in a 1 per cent. solution), ammonia (the use of which is dangerous), euphorbia maculata, jaborandi, and a "snakestone" from North Carolina. The only one of these which gave any promise was jaborandi, which was decidedly antidotal in rabbits, though failing in birds. There are those, however, who are convinced that in this agent we possess a sure and reliable antidote. Two persons, it is stated, one of them a physician in Washington, have offered themselves for experiment in connection with this agent. In connection with this subject we must not forget that as in the case of hydrophobia, the majority—⅞ths according to Weir Mitchell—of those bitten by rattlesnake recover. This constitutes a source of error with which it is difficult to deal and which it is of the highest importance not to overlook in the solution of this question.

Vaccination Against Cholera.—Dr. N. Gamaleia, of Odessa, claims to have discovered a method of preventive vaccination for Asiatic Cholera. At a meeting of the Paris Académie de Médecine on August 21st, (*Br. Med. Jour.*, Sept. 1st, 1888) Mr. Pasteur presented Dr. Gamaleia's communication on the subject in which his methods were described. As the ordinary microbes of cholera is so highly virulent that it is not inoculable in the lower animals, Dr. Gamaleia has discovered a method of intensifying its virulence to an extensive degree by conveying it to pigeons after it has passed through the guinea-pig.

"The microbe was found in the blood of pigeons which had died of the disease so induced. After passing through several pigeons the microbe acquired such virulence that one or two drops of the blood of an inoculated bird sufficed to

kill healthy birds in from eight to twelve hours, whilst an even smaller dose proved fatal to guinea-pigs. If the virus obtained after passing through pigeons is cultivated in nutrient broth and is afterwards exposed to a temperature of 120°C. for twenty minutes, it will be found that there is left in the sterilised culture a toxic substance which produces characteristic phenomena in animals. If 4 cubic centimètres of the sterilised broth be injected into a guinea-pig, the animal's temperature gradually falls, and death takes place from twenty to twenty-four hours. Pigeons die in the same way but require a larger quantity, namely, 12 cubic centimètres injected in one dose. On the other hand, if the same quantity of the sterilised fluid is injected, but in two or more doses given at intervals of a day or two, they do not die, but are found to have become refactory to cholera to such an extent that even half a cubic centimètre of the most intense virus (the blood of an inoculated pigeon) is not fatal to them. Guinea-pigs are still more easily vaccinated by injecting the sterilised broth in doses of 2 centimètres once or twice repeated. Dr. Gamaleia has found this *chemical* vaccine of unfailing efficiency and perfectly innocuous. He admits he derived the idea of it from a paper of M. Pasteur's on the chemical vaccine of rabies, and from Dr. Roux's experiments on septicæmia. He offers to repeat the experiments in M. Pasteur's laboratory, in presence of a committee of the Académie des Sciences. He further volunteers to test the method on himself in order to determine the question of its applicability to man and the dose of the vaccine required, and states that he is prepared to undertake a journey to the countries where cholera prevails with the view of proving the value of his discovery. M. Pasteur, after reading the communication, said he would be glad to place his laboratory at the disposal of Dr. Gamaleia, who had already worked therein on more than one occasion. In 1886 he had been sent to Paris by the Odessa municipality to study the method of preventive inoculations for hydrophobia, which he had since applied with great success in his native country."

Miscellany.

Professor G. Stanley Hall.—G. Stanley Hall has accepted the presidency of Clark University, Worcester, Mass. The two following extracts, the first from the letter tendering the position, the second from Professor Hall's letter of acceptance, throw some light on what may be the policy and character of the as yet unformed institution. The trustees write, "In the work to which you are thus called, the trustees promise you a hearty and unselfish co-operation. They desire to impose on you no trammels. They have no friends for whom they wish to provide at the expense of the interests of the institution, no pet theories to press upon you in derogation of your judgment, no sectarian tests to apply, no guaranties to require, save such as are implied by your acceptance of this trust. Their single desire is to fit men for the highest duties of life, and to that end that this institution, in whatever branches of sound learning it may find itself engaged, may be made a leader and a light. To this high purpose they have dedicated their university, and, in calling you to the first position of influence and authority for its accomplishment, they give you their present confidence, and the assurance of sympathy, co-operation, and support." Dr. Hall replied, "The work of organizing another college of the old New England type, or even the attempt to duplicate those that are best among the established institutions, old or new, would not induce me to leave. But as I have come to know the rare educational wisdom, as well as the rare munificence, of your founder; the single and express desire of the corporation, that, in whatever branches of sound learning it may engage, the new university may be a leader and a light; the many advantages of location afforded by your city, which seem to make the place of this great foundation no less auspicious than is the

present time; the public co-operation, interest, and good-will of your citizens; and as I realize how these influences, once fairly organized, must tend in this day to still further university progress along old lines and the opening of new ones,—I am drawn with hope and enthusiasm, too strong to resist, from this present to the future service to which you call me."

The Modern Treatment of Uterine Cancer.—A. Reeves Jackson, A.M., M. D., of Chicago, Ill., in the *Medical Record* says: Correct views of pathology and accurate diagnosis form the only rational grounds for proper treatment of disease. The modern treatment of cancer is based on the theory of its local origin, and implies the possibility of its complete removal. If this theory be true, failure to cure depends upon the essential inadequacy of the means used; or their untimely or inefficient employment. All remedial means are inadequate which have not the power to remove the diseased structures. The object of the treatment may be palliative or radical, the determination depending upon the location and extent of the disease and the general condition of the patient. Palliative measures are always available, while radical measures are not always safely applicable. Medical agents taken internally may be beneficial as palliatives, but are useless, so far as we know, in removing or modifying the progress of disease.

Conclusion: 1. Any operation for cancer which does not completely remove the disease will be followed by recurrence

2. During life the limit of cancerous disease originating in any part of the uterus can not be known, hence no operative procedure can guarantee complete removal.

3. In view of this fact, no operation is justifiable which greatly endangers life, provided other and safer methods are available.

4. Vaginal hysterectomy is more dangerous in a certain sense, than the disease against which it is used, that is, a given number of patients afflicted with uterine cancer will live longer without than with the operation.

5. Other methods of treatment, attended by not more than one-sixth to one-fourth the mortality of vaginal hysterectomy, are equally efficient in ameliorating the symptoms and retarding the progress of the trouble, and they have been followed by asseemingly good results as regards recurrence. Hence they should be preferred.

6. Vaginal hysterectomy does not avert or lesson suffering, it destroys and does not save life. It is, therefore, not a useful but an injurious operation, and as such is unjustifiable.—*American Lancet.*

Tait (Lawson) on Urticaria Diffusa Occurring After Ovariotomy.— After nearly all kinds of adbominal section, acute attacks of urticaria occur in some seven per cent of the cases. It seems sometimes to come in outbreak s, making its appearance in seven or eight cases, one after the other, in a very short space of time. The symptoms, although occasionally severe, never give any cause for anxiety, and the administration of a saline purgative generally causes them to disappear.—*British Medical Journal* June 9, 1888.

Death From Sea-Sickness.—Death from sea-sickness is rare, but a case recently occurred on board the West Highland steamer *Dunara Castle*, while on the voyage from Tiree to the Clyde. The patient was a little girl, aged 8, who became sick while the steamer was running between Islay and the Mull of Cantyre. The sickness was most severe, and culminated in a convulsive fit, in which the patient died. Every assistance was rendered by Dr. Frederick Adams, of Glasgow, who was a passenger on board.—*Brit. Med. Jour.*

Gynæcological Specialism and Woman's Place Therein.—In this connection I may venture to observe that I cannot agree with those who are opposed to the admission of women into the practice of our department of medico-chirurgical science for which their sex should apparently render them so especially adapted. I can see no valid reason why any well-qualified practitioner, male or female, should not be welcomed

amongst us. Nor, if there are women who prefer the medical attendance of their own sex, does it seem fair that in this age of free trade they should not be afforded every opportunity of exercising their discretion in a matter so personal to themselves. For my own part, I greatly doubt that, in these countries at least, "the Lady Doctors" (as they are termed) will ever replace the ruder sex in the general estimation of their sick sisters. But, if not here, elsewhere there is unquestionably an ample field for female practitioners, and more especially in India and other Oriental countries, where millions of suffering women and children are fanatically excluded from the possibility of any other skilled professional assistance; and I therefore think that such practitioners are entitled to admission into our ranks in the British Medical Association.—*Dr. T. More Madden, Address before British Medical Association.*

Macleod on Chloroform. — After fairly trying most of the agents in use now exclusively employ chloroform, and having for years kept an accurate record of its administration, and given it freely and without stint in all sorts of surgical proceedings, never refusing its benefits to a single patient, no matter what his condition or the operation to be performed, I have never had an accident except once, when an epileptic took a fit while being put under its influence, and died with a full and fixed chest. For speed and energy, for ease of application and agreeableness, for rapid recovery with little subsequent trouble, and for safety *when properly administered*, chloroform is, in my opinion, unrivalled. That it needs no apparatus but a towel is a great point in its favour. This is the record of one who has administered it constantly almost from the time of its introduction into practice, and the statement in this sense may not be without its value. I never measure the quantity used, but exhibit it freely, and take the colour of the lips and the respiration as my chief guides. Making the patient count at the beginning of the administration is a most valuable aid; and Nélaton's inversion of the body with artificial respiration is, I think, the surest mode of resuscitation in danger from failure of the heart. A minute is about the average period for inducing insensibility; and it is very rare, if proper precautions are taken in the way of preparation and after-management, to have any sickness. There is little doubt that "nervous" persons and those who are intemperate in the use of alcohol, tobacco, and narcotics, and also epileptics, require special care. Over-saturation from the too frequent renewal of chloroform induces, in my opinion, the chief after-trouble.—*Brit. Med. Journal.*

W. C. Galloway, M.D., of N. C. on Dysentery.—Let me here epitomize my own cases—50 in 1886 and 30 in 1887, total 80: 1 adult death—only one case had in my own practice; mortality among infants and small children not remembered; 2 bad acute attacks took on chronicity; 1 had parotiditis in right gland; 3 had acute articular rheumatism —hips, knees and ankles involved in one, knees in another, and hips, knees, ankles, first joint, great toes, shoulders, elbows and wrists in the other—last was sick altogether three months. About four-fifths of the cases between April and July. Pulse normal to 160, temperature natural to 105, malarial complications numerous, but number not known, 11 excessively ill—time 14 to 35 days—complications not included—3 had rigid abdomen like the tonic rigidity in peritonitis—certainly not peritonitis. (This feature not mentioned by any of the books.) Twelve cases, so far, this year, without any special features. — *N. C. Med. Jour.*, July, 1888.

Medical Items.

Three cases of leprosy have been found in St. Louis, says the *St. Louis Medical Journal.*

The Philadelphia County Medical Society have at last admitted a lady doctor to its membership. The world moves.

Rhus poisoning is said to yield quickly to the local application of fluid extract of Grindelia robusta.

The meeting of the Southern Surgical and Gynæcological Association, which was announced for the 11th, 12th, and 13th inst., was postponed in consequence of the quarantine laws.

The Mississippi Valley Medical Association will meet in Pickwick Theatre, Jefferson and Washington Avenues, in St. Louis, September 25, 26, and 27, 1888, two weeks later than first announced.

Dr. Wm. Rickert, of this city, has renewed his practice after five months residence in Europe where he attended the leading hospitals of Great Britain and on the Continent with much profit and pleasure.

The many physicians of this city who have been absent from work on summer tours have returned with but few exceptions, and many familiar faces bear the evidences of a vigorous "outing." The health of the city was never better than at present. Not a few of our friends have wished that their "outing" had been prolonged.

Dr. W. D. Bidwell, of Leavenworth, Kansas, reports a healthy boy baby, the mother of which was only fourteen years of age, the grandmother twenty-eight, the great-grandmother being forty-nine. That family is apparently good for a couple more generations. —*Kansas City Medical Index.*

Dr. F. Bramann, first assistant in the University Surgical Clinic, who performed on the late Emperor Frederick, has qualified for the position of *Privat docent* in the University of Berlin by an inaugural dissertation on "Myotomy and Tenotomy To-day and in the Pre-antiseptic Period.—*Record.*

The Treatment of Bleeding From the Nose.—Wade recommends the expedient of Hutchinson. The hands and feet of the patient are placed in water as hot as can be borne. This will check the most obstinate epistaxis, without any ill consequences.—*Deutsche medizin. Wochenschr.*, July 19.—*Med. News.*

The New York Polyclinic Hospital.—The Faculty of the New York Polyclinic have decided to increase the clinical facilities of this Institution by establishing a spacious Hospital immediately connected with the College Building. It will be opened for the reception of patients in October next.

Dr. N. R. Gorter, of this city, who accompanied Mr. Robert Garrett in his journey around the world, as his medical attendant, has returned home. Dr. Gorter suffered from a sun stroke in India, and had an attack of typhoid fever in Paris. He has recovered his health and will now renew his professional work in this city.

The Barcelona Academy of Medicine and Surgery has offered the Gari Prize of 1500 marks ($375) for the best essay upon The Pathogenesis of Gonorrhœa (its Clinical Varieties, Complications, Prophylaxis, with Drawings). The paper must be written in Spanish, French or Italian, accompanied with the usual motto, and handed in before June 30, 1889.—*Med. News.*

Dr. H. P. C. Wilson and Dr. J. J. Chisolm, of this City, have returned have from a summer vacation spent in Europe. Dr. Wilson attended the Annual Meeting of the British Medical Association, of which he is a member, and furnishes the Journal, of the present issue, with on account of the Glasgow meeting. Dr. Wilson's letters to the Journal have been read with interest by his friends in the profession here.

By the will of the late Dr. Rachael L. Bodley, one of the Faculty of the Woman's Medical College, the testatrix bequeaths all her scientific books and six cases containing her herbarium and dried plants to the Woman's Medical College. The balance of the books in her library and the walnut cases containing them go to the Presbyterian House for Widows and Single Women. Dr. Bodley left an estate valued at $10,000.—*Gaillard's Med. Jour.*

Prizes Offered for Competition by the Empress Augusta of Germany.—The International Jury for assessing the prizes offered by Her Majesty the Empress Augusta of Germany, for the best forms and arrangement of internal fittings and furniture for a movable hut-hospital, is to meet at Brussels on September 3rd next. Sir Thomas Longmore, of Netley, has been invited to act as British representative and member of the Jury.—*Brit. Med. Jour.*

Great are the wonders of the telephone. A physician reports to *Gaillard's Medical Journal* that he was saved a two-mile ride through a driving storm the other night by having the patient, a child, brought to the instrument and held there until it coughed. He diagnosed false croup, prescribed two grains of turpeth mineral, and turned in for an undisturbed sleep during the remainder of the night. He found the patient in the morning doing nicely —under the care of another doctor.

The Congress of American Physicians and Surgeons to be held in Washington during the coming week promises to be a notable success. The attendence from this city will be large. The meetings of the Congress and of the Societies which compose it, will be open to the profession. Any medical man who may choose to attend has the privilege; but the privilege of taking part in the discussions will be limited to the members, guests, and those who may be invited to do so by the societies respectively.

"The theory seems to have been adopted that no man who served in the army can be the subject of death, or impaired health, except they are chargeable to his service. Medical theories are set at naught, and the most startling relation is claimed between alleged incidents of military service and disability or death. Fatal apoplexy is admitted as the result of quite insignificant wound; heart disease is attributed to chronic diarrhœa, consumption to hernia, and suicide is traced to army service in a wonderfully devious and curious way."—*President Cleveland on Pensions.*

Original Articles.

PRESIDENT'S ADDRESS.

THE RELATION OF SOCIAL LIFE TO SURGICAL DISEASE.*

BY D. HAYES AGNEW, M. D.,

President of the American Surgical Association.

Fellows of the American Surgical Association:

As the generations fare on, enriched by the results of scientific labor, which pours its tides of opulence into all the departments of human thought and industry, there follow through a reactive or reflex influence certain notable changes, not only on the the life and manners of a people but on their physical and mental disease. The more advanced a civilization the more complex become the problems which surround it. While the accumulation of wealth and the multiplication of appliances for human comfort have in the aggregate contributed to the well being of the race, yet there is reason to fear, that the insatiate and ambitious demands of the masterful leaders in the work of the world, unless conditioned, and environed by reasonable safegaurds, may acquire their triumphs at the expense of human life. It is a suggestive and a solemn thought, that in the victorious march of civilization, thousands of victims must perish beneath her chariot wheels. There really seems to be a perpetual antagonism between man's inventions and discoveries and the well being of a no inconsiderable fraction of humanity. He reduces the elastic vapor of water to practical use, and is rewarded by seeing countless numbers of human beings blown into shapeless masses by his rebellious servant: His chemistry creates formidable explosives capable of dislodging the solid strata of the earth, and yet, in wicked hands, become instruments for consummating such diabolical plots as serve to unsettle the peace of a nation! He rears manufactories for fashioning multitudinous fabrics which minister to the comfort and luxury of the race, and yet while the hands of the fabricator are busy manipulating the materials of their industries, he is breathing a death laden air. We send our missionaries to China and the Sandwich islands to reclaim their peoples from the barbarities of heathenism, and then our commerce to ruin their souls and wreck their bodies. There seems indeed to be an eternal conflict between good and evil.

Considerations like these naturally lead to a very inviting field of study. Namely the relation between the material prosperity of a people and the forms of their disease. What I propose however in discharging one of the duties belonging to the honorable office to which, by your kind suffrages I have been elected, is very briefly to follow one line of this inquiry, that is,

THE RELATION OF SOCIAL LIFE TO SURGICAL DISEASES.

There is no tyranny more exacting or despotic than that exercised by the conventionalities which govern our living. All stages of life from infancy to old age are under its domination. It dictates the education, the manners, the works, the dress, the forms of speech, in fine the whole being. Beyond all contradiction the behests of fashion are vastly more influential in governing public conduct, than any arguments drawn from the teachings of structure and function.

As a rule when the conflict is between taste and reason, the victory will be on the side of taste. In nothing is this more forcibly displayed than in the apparel used to protect the body. It is not an agreeable task to peer into the wardrobes or dressing rooms of our fair country women. I have no special taste for exploring museums of bizarre collections. Indeed, without a key to interpret the curious and ingenious mechanisms for clothing the form divine, such an exploration would be like an archæologist attempting egyptology ignorant of cuneiform inscriptions. I have however some knowledge of human anatomy in

*Read before the American Surgical Association, September 18th, 1888.

its broadest sense, and when I look upon the masterpieces of the human form whether in marble or on canvas, a Belvedere Apollo or a venus de Medici and contrast these with the dressed out specimens of modern women, I am forced to admiration, not so much at the amazing ingenuity displayed in concealing the divinely appointed form as at the plasticity and patient submission of mortal clay under the despotism of a conventional inquisition. Were these processes of mutilation and abnormality harmless, did the body consist of a mere mass of protoplasm, capable under the application of certain stimuli of assuming, normally, protean shapes, the subject might be passed over with the feelings of a naturalist, but this is not so. These violations of the laws of structure bring with them serious penal inflictions, which did they terminate with the original offender, might be dismissed with a sentiment of pity, but projecting as they do their banefull consequences to successors they become proper subjects for criticism.

Let me name a few examples as illustrative of my subject. For some time the profession has been speculating on the caustion of nasal and post-nasal catarrh with its accompanying auditory defects, the growing frequency of which cannot have escaped general observation. Doubtless no single agency will explain the presence among us of this unpleasant disease, yet there are facts connected with this affection which to me are very suggestive. I cannot recall an instance in which I have met with the disease among females belonging to the Society of Friends, (Dunkards or Menonites.) If this, on more extended observation proves to be true, may not the head-dress peculiar to these people be accepted in explanation of their exemption. The bonnet which at one time overshadowed the entire head, as all know, has been gradually shrinking in its dimensions, until it has become a mere shadow of its former self, and offers no protection whatever to the head. As a substitute, I would not insist upon the quaint head-gear of the friend, though I believe that any modification which will protect this part of the body, will lessen the tendency to catarrhal inflammation of the naso-pharyngeal mucous membrane.

Muscular Restraint.— A legion of physical imperfections arise from muscular restraint. Among these may be mentioned weak ankles, narrow or contracted chests, round shoulders, projecting scapulæ and lateral curvatures of the spine. The foolish concession to appearance and the unwise partiality of parents for enforced system of education, the demands of which bear no just proportion to the capacity of the infantile mind, constitute the initial or determining force of these physical imperfections. In many cases the weak ankles of children, characterized by eversion of the feet, thus allowing the superincumbent weight of the body to be transmitted to the latter inside of the proper centre of support, is largely chargeable to the miserable practice of placing on the little ones, long before they are able to walk, boots tightly laced up the limb some distance above the ankles. The confinement of the flexor and extensor muscles by this constriction prevents that free play of movement which reacts so favorably on all the elements of an articulation, and that too at a time when the growing forces are at full tide, so that when the time arrives for standing and walking, the muscles are unequal to the firm support of the joint. The consequence of this feebleness is soon seen in the turning outwards of the feet throwing the strain on the internal lateral ligaments which in turn become elongated through growth and thus the defect becomes established, but the evil does not terminate here. The calcaneo-cuboid and the astragalo-scaphoid ligaments losing the proper support of the tendon of the posterior tibial muscle, under the abnormal tension begin to yield and to the deformity of eversion is added that of "flat-foot." That the above is not a mere hypothetical explanation of the ankle defects, I have many times verified by finding the threatening symptoms disappear after liberating the imprisoned muscles and subjecting the enfeebled parts to a judicious massage. Under no

circumstance as is too often the case, should instrumental apparatus be applied. Unless, in cases where from neglect, the deformity is thouroghly established and is progressive.

Take another deformity that of bow-leg. On the earliest signs of the unsightly curve, the limb is to often trammelled with irons and the growth of the muscles arrested, when it is well known that if manual force be systematically applied two or three times a day, the limbs will gradually assume their typical form.

Again in further illustration of our general text, take as an example a child who for one long or two short sessions for six days of the week sits over the study desk compelled to assume a position in which from the inclination of the body the shoulders fall forward, the head being supported most probably on the elbows and hands. In such a posture, the great serrati and pectoralis major and minor muscles are in a state of relaxation while the erector spinæ and trapezei muscles are in a state of tension. This change in the position of the shoulders gives the scapulæ over, without antagonism or resistance, to the action of the rhomboidei, and the levatores angulæ scapulæ muscles, which acting conjointly cause that projection of the lower angles of the shoulder blades, which the older anatomists termed "scapulæ alatæ". To all this must be added the very important factor of four to six hours in the school room and two hours at least of home preparation for the following days recitations, during which time the respiratory functions having been reduced to a minimum of activity, the muscles of the chest are comparatively passive and æration of the blood, tardy. Certainly no combinations of conditions could be better devised for forming contracted chests and round shoulders. It is not long before the watchful eye of the mother detects the change in the figure of her child. She will probably discover this and take alarm, even when the pale face, the languid air and the capricious appetite of the child cause no activity; and then comes the second act in the drama of physical deterioration, namely a resort to shoulder braces and stays, in order to accomplish that which the muscles should be taught to do without restraint or incumbrance.

Lateral Curvatures.—While it is true that lateral curvatures of the spine depend upon causes both central and peripheral yet in no small number the deformity is clearly attributable to influences of a social nature. The young column, by reason of the non-union of the epiphyses and diaphyses and the surpple character of its ligaments, is extremely flexible. Whatever therefore destroys the muscular equipose, however inconsiderable the force, if persistently repeated, changes the centre of gravity and develops primary and compensating curves. For six months in the year, any fine morning, groups of young children may be seen plodding along our streets with a minature library of books suspended from one shoulder. To the already preponderating scale of the balance, add the additional factor, a probably badly arranged light, compelling these little *savants* to assume a lateral inclination of the body in order to obtain the necessary illumination of the subjects of the study, and you have all of the conditions necessary for perpetuating the lateral deformity. "Just as the twig is bent, the tree's inclined." As in the case of round shoulders, so here in order to prop up the falling column, instrumental contrivances are immediately called into requisition. The body is encased in a formidable coat of mail, to be followed by muscular atrophy and permanent distortion of one of the otherwise most beautiful pieces of mechanism in the human frame. It is true that in most educational institutions for the young, provisions are made for physical culture and these are in some measure antidotal to the evils complained of, but in my judgment do not at all compensate for that free unstudied romp in the open air, untrammelled by the hard and fast rules of calisthenics, so fascinating to the young child. Nor does the evil end here. While the forcing process which is to stimulate the mental powers far beyond the real

capacity of the immature and growing brain to receive, is in progress, another is inaugurated which is to qualify, especially the female child to acquit herself with distinction when the time arrives for entering the great world of society, or as Thomas Brown would style it "for the frivolous work of published idleness." The gait and carriage must be reduced to prescribed rules, the voice toned down to a drawl or trained to move like a mountain torrent. The muscular apparatus of the face must be taught to express, not the spontaneous and natural outflow of feeling which wells up unbidden from the magic chamber of the heart, but rather to produce an effect; and so this work of transformation goes on until it culminates in the full-blown society girl. Is it any wonder that under such a scheme of education, conducted throughout by a studied disregard of both the physical and mental constitution, and exercising as it does such tremendous drafts on the nervous system, that the world is becoming filled with a class of flat-breasted, spindle-limbed young women, unfitted for the varied and responsible functions of womanhood, qualifications too, which under a different regimen and directed into proper channels would exert a most potential influence on all the great social and moral problems of the age.

While thus plain spoken on the frivolous methods of living, I do not wish to be understood as being unfriendly to the highest cultivation of the mental and physical powers, if conducted on lines in harmony with the organization, nor to any teachings which may conduce to personal grace or elegance of manners, so that the manly or womanly personality of the individual be not sacrificed to the Moloch of sentiment and sham. Indeed indifference to these things is inexcusable in either man or woman as not only lessening their influence in the world but in many respects disqualifying them for the highest discharge of the duties of modern life. Valuable as may be the unpolished diamond, yet it is only after the wheel of the lapidary has worn away the dull incrustations, that its true brilliancy is revealed and the gem is fitted to adorn the brow or the breast of beauty.

Bodily Constriction.—In the further discussion of my subject, I may next notice the evils of visceral displacement and pressure, consequent on abdominal constriction. Whatever may be said in regard to Greek and Roman life, the infinite care which these people displayed in developing and maintaining the very best type of the human form, is worthy of admiration. The Ionic "cheton" spoken of by Attic writers and so often represented in the bronzes of Herculaneum, while it would not exactly satisfy the modern idea of dress, was at least free from the charge of interfering with the contour of the human figure. The painters and sculptors of those classic days were reverent students of nature. Their deliniations were true to life. Their works furnish us with no hour-glass contractions of the human body. The constriction of the waist operates injuriously on both the supra and infra diapraghmatic organs. Any force acting on the base of the thorax and preventing the expansion of its walls, concentrates the function of respiration which should be general, on the apices of the lungs and hence, under these circumstances, the movements of breathing are for the most part confined to the summit of the chest. As the initial seat of tuberculosis is located at the upper part of the lungs may not the inordinate work entailed on these parts by constriction, have some part in hastening such deposits in the female where the predisposition exists? It is this forcing inwards of the costal border of the thorax which causes the groove on the anterior surface of the liver, so familiar to anatomists. This pressure can not fail to interfere with the descent of the diapraghm, and with the functions of the gall bladder and duodenum, and exercises no small degree of influence in favoring the formation of biliary calculi, females being peculiarly prone to such concretions. The extent to which the liver may be damaged by extreme constriction of the waist, is well illustrated by a case quite recently reported in the *British Medical Journal* in which a

considerable portion of the left lobe of the liver had been separated from the right, the two being connected only by a band of connective tissue, and which enabled the operator to remove the detatched mass without difficulty. The evil effects of this constriction on the viscera of the abdomen and pelvis is most strikingly witnessed in the embarrassed portal circulation, in the different uterine displacements, elongation of ligaments, displaced ovaries, tubal inflammation, hemorrhoids, hernia and other morbid conditions which either prevent or disqualify the woman for the exercise of those functions of maternity, and which in addition, through reflex influences, entail a host of functional disorders reaching into every avenue of the body and invading both the mental and moral constitution of the victim. So prolific have these infirmities become that a new department of surgery has been organised for their special management. To what, if not the social causes, can these morbid changes of structure in the pelvic organs, especially of the uterus and its appendages, be attributed? Why should laceration of the cervix uteri be so common an accident? Labor is a natural process and ought not under ordinary circumstances to be attended by lesion of uterine tissue. I can conceive of no agency more likely to induce that muscular degeneration which predisposes to this accident than the modes and methods of modern living especially among the inhabitants of great cities. In the expression "modern living," much is embraced. It includes culinary pharmacy, over-feeding and drinking, insufficient or injudicious exercise, improperly heated appartments and a disproportion between the hours of exercise and rest. Contrast if you will the muscles of the hardy, country house-wife, who bearing the cares and responsibilities of a dependent family, bustless about the livelong day in doors and out of doors, eats with a relish her plain and simple fare, repairs at reasonable hours to bed and sleeps the sleep of the beloved, undisturbed by dyspeptic night-mares and rising with the golden dawn, resumes the round of domestic toil with a clear head and supple limbs; I say contrast this type of a class with that of another, the woman born to luxury and ease whose capricious and exacting taste taxes the art of the professional caterer, who drags out the morning hours toying with some crazy piece of embroidery or trashy novel, lunches at one, rides out in the afternoon for an airing of two or three hours, returns to a dinner of five or six courses at seven, completes the evening at the opera, the theatre or the assembly, and coming home after midnight, crawls into bed weary and exhausted in body and mind, only to rise with the best hours of the morning gone, for another day of aimless routine life. Can it be doubted that in the first case, with a digestion unimpaired, with the products of textural change consumed by functional activity and eliminated through the proper emunctories, the woman should possess a vital resistance and a tone of tissue although superior to that of the other, whose habits of living must necessarily favor their faulty metamorphosis?

To these same agencies must be attributed that brood of nervous and hysterical evils, for the relief of which the gynæcologist, too often, I fear, invades the domain of womanhood, around which her whole sexual nature revolves, and which, save only in the direct extremity, should be sacred against all operative intrusion.

Late Marriages constitute another social evil, the penal inflictions of which involves both sexes alike. Pride and luxury determine long engagements or deferred proposals. Marriage it is believed necessarily involves an establishments, a display, a retinue of servitors. The good old notion of two souls being united in wedlock for the purpose of being mutual helpmates, and patiently together working up from modest beginnings to affluence, seem to be entirely at variance with the modern idea of this relation. In the meantime the young man is betrayed into unlawful sources of gratification, alike destructive to moral and physical purity, the pollution of which incontinence is often subsequently communicated and perpetuated to wife

and offspring. I would not dare to say how many cases of this nature have been entrusted to my professional confidence, though I doubt not my experience does not differ from that of my professional brethern whom I address. It is under such circumstances that many of those infective inflammations of the Fallopian tubes as salpingitis and pyo-salpinx arise and which entail the most serious deterioration of health.

The Foot and the Shoe.—It may be thought by some persons that the sub ject of the foot and the shoe is not of sufficient dignity to appear in a public address. The Romans and the Greeks thought differently. The literature of both people is full of references to the shoe worn by both sexes. So important indeed are the feet to the well-being of the body that whatever impairs their usefulness, either for support or locomotion becomes a positive calamity. Nothing can be more unlike the human foot than the modern shoe. Let any one leave the impression of his or her foot in the wet sand of the sea-shore and then place a long side of the imprint, a fasionable shoe; and the two were ever intended for each other would scarcely strike a child of the forests. The North American indian entertains juster notions about clothing this portion of his body than does the civilized denizen of New York or Philadelphia. Compare the moccasin with the shoe of the city belle. Compare the *sándalon* or the *pesdichá* of Pollux and of Aristophanes, with the same and we shall see that the savage and the polished Greek alike understood the value of round feet in the race of life. It is the imperfect adaptation of the shoe to the foot which constitutes the fruitful source of tired ankles, corns, bunions, overlapping of the toes and in-growing nails. Some idea may be formed of the amgnitude of the evil from the fact that of eight hundred patients under the care of a prominent chiropodist of Philadelphia, the great majority of the defects were entirely attributable to the heels and the contracted toes of the shoes. Especially do these physical encumbrances arising from a blind submission to social laws operate disadvantageously to our fair women at the beginning of the new dispensation requiring both muscles and brains, and when her friends propose to sweep away all the old traditions and claim for her the earth with all its masculine employments.

Games and Amusements which in themselves are proper and praiseworthy, too often become developed into a craze, working both moral and physical mischief. Professor Leuf, himself a professional in the national game of base ball has described the pitcher's arm, a condition of over-taxed function and one in which all the anatomical elements of the upper arm are involved. There is also the tennis arm and the swollen supersensitive prostate of the bicyclist, both due to the abuse of popular amusements.

Defects of refraction or visual defects constitute another class of affections fairly attributable in many instances to social influences. The number of children which may be seen in our streets any day wearing glasses, has become a matter of common observation. It is far from being probable that the most exquisite piece of mechanism, the human eye, came this Divine Artificer, imperfect. Because eyes are young, it does not follow that they are thereby better fitted to sustain prolonged use. Just the reverse is true and it is high time that parents and educators begin to recognize the fact. The power of the eyes for continued use like that of other organs of the body is one of graduation. It moves in the general procession and strengthens with the advance in life until development has attained to its zenith. Not only so, but the eye being a part of the body it must suffer or rejoice through the operation of general causes. A bone may have its normal curves changed, a tendon may slip from its appointed groove, or a blood-vessel be destroyed and yet very little disability be realized, but the eye is made up of such extremely delicate structures and acts according to fixed physical laws, that not the slightest alterations of a curve or the inability or density of its media can occur without great vitiation of function. To exact therefore long hours of study from children of a tender age, involves a degree

of functional strain, altogether disproportionate to the structural resources of the organ, and by disturbing the orderly processes of nutrition gives rise to hypermetropia, asthenopia, astigmatism and its companion headache. That the picture is not too highly colored or the causation overstrained, we have only to contrast the children born and reared in those portions of the country, not too much dominated by the methods of modern civilization and who rarely demand a resort to artificial aids to provide for abnormalities of vision. The only remedy for the evil when infantile scholarship is insisted upon is the Kindergarten or object system, the most natural and effective plan of impressing the young mind.

Renal Disease.—Is there any reasonable explanation drawn from course of a social nature for the great frequency of those renal disorders which come, more particularly under the case of the surgeon as crystalline deposits and calculi? The maintaining the general health at the highest physiological standard, a proper quality of food and the proper disposal of tissue waste are essential conditions. Along with wealth and luxury come the abuses of the table. Americans are fast becoming a nation of dyspeptics. Our country is so rich in the products of any zone; that no where in the world, can you find such a variety of foods, animal and vegetable. These foods manipulated in a thousand ways by the subtle art of the professional cook, almost neccesarily betray one into excess and also creates the desire for wines and other alcoholic beverages to aid the stomach in disposing of its plethoric supply. In great cities which furnish relatively the largest number of cases of renal disease; affecting preeminently the mercantile and sedentary classes, we find just the conditions favorable to their development. The competitions of trade keep the merchant always at white heat.

Time is golden and the street car, and other means of conveyance annihilate distance and the ride is substituted for the needful walk. A hasty lunch at the most convenient restaurant, satisfies the inner man, until the business of the day is closed, when weary and worn, he is driven to his home to partake of a course dinner, the balance of the evening to be spent on the lounge with the evening paper or the latest periodical. To this literary man the fascinations of the study and the library charm him away with their siren voices from the fields and the highways, until bodily exercise grows distasteful and repugnant. In the meantime there has been no provision made for the waste or tissue metamorphoses of the body through that great agency exercise. These accumulate in the blood the internal eliminating organs of which the kidneys are chief, are overtaxed and then follow the evils of malassimilation, and of excretion, in the form of water, and oxalates, often resulting in the formation of calculi."

In conclusion may we ever hope for a time, when the race will realize that these bodies which we wear, which God has so highly honored by his own incarnation, are sacred temples to be kept, in harmony with recognized physical laws, and not to be made instruments of mere animal gratification.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS, WASHINGTON, 1888.

THE PRESIDENT'S ADDRESS.

Delivered Sept. 20, 1888.

ON MEDICAL MUSEUMS, WITH SPECIAL REFERENCE TO THE ARMY MEDICAL MUSEUM AT WASHINGTON.

By John S. Billings, M.D.,

Surgeon U. S. A.

Gentlemen of the Congress:—Our articles of confederation require that the President shall give an address. In endeavoring to comply with this regulation I must ask your indulgence, for, while I think I have something to say, I cannot give you such a discourse as would befit the audience, the occasion and the subject.

The prominent characteristic of the great majority of the societies composing this Congress is that their members have, as a rule, been chosen because they have either made some valuable contribution to medical literature, or have, in some way, rendered aid to the profession; in other words, they are supposed to be men whose labor and thought have not been confined to their own interests, or to those of their own patients. It may, therefore, be assumed that you are all interested in medical science, not merely as a means of giving new modes of diagnosis or of treatment, but also for its own sake, for the sake of knowing, for the pleasure of investigation, and in the hope of helping others, and that, while the majority have devoted themselves more or less to special branches, they have not, in so doing, lost interest in what may be for the general good of the whole profession.

I am here as the representative of the medical department of the general government, which has need of the best knowledge of all the specialties, and is beginning, in its turn, to do something for each.

The physicians in the government service are all general practitioners, and are expected to have such an education and training as will fit them to deal, alone and without consultation, with the diseases and injuries to which men, women, and children are liable. You have been, and still are, their teachers—in the lecture-room and the hospital before they entered the service—in your text-books, monographs, and contributions to journals or transactions which follow them to their widely scattered posts of duty. They are your warm friends; the more you discover, the greater your skill, the more recognition which your work receives, the better they are pleased.

Within the last twenty-five years the general government has, in its turn, done something for medicine and for you, by founding and maintaining a medical library and museum in Washington under the direction of the Medical Department of the Army.

I have had occasion several times to call attention to the library, which no doubt is that part most immediately useful to physicians, and which has attracted most attention. To-night I propose to speak of the other branch, in whose proper development it is desirable that you should take an intelligent interest, after giving a brief sketch of the development of modern medical museums we will consider more especially our own national medical collection as it is, and as it ought to be.*

The origin of collections of objects of natural history was possibly, as suggested by Beekman, the custom of keeping curious objects in temples; but we have no record of the formation of any collections, specially connected with anatomy or medicine before the sixteenth century. It is true that human anatomy had been introduced in the schools of Mundinus in 1306, and that no doubt in Bologna, in Paris, and a few other places, a skeleton or two was preserved for purposes of instruction; but alcohol was unknown as a preservative before the end of the fifteenth century, anatomical details were of no interest until Vesalius had stirred up controversy with the Galenists, and injected preparations were not thought of until after Harvey's announcement, in 1628, of the discovery of the circulation of the blood. †

The introduction of the use of the microscope at the beginning of the seventeenth century, and the collections of preparations for use with this instrument made by Leeuwenhoek and Ruysch, gave a powerful stimulus to formation of mu-

* As a "museum," in the original sense of the word, is a building or place in which are collected objects of interest to the muses—that is objects of art, literature, etc.—the phrases, "medical museum," "museum of pathology," etc., would have seemed quite improper in the days of Hippocrates, just as the prevailing pronunciation of the word museum grates on the ears of the elders accustomed to the strictly proper way—*i. e.*, muséum. Custom has, however, so strongly sanctioned the use of the word museum in the sense of a collection of different articles, that it would be folly to attempt to give it a more limited signification, and though lexicographers still recognize only the word as accented on the penultima e syllable, the tendency to accent the first syllable is so strong and constant that it is safe to predict that mu'seum will, in popular usage in this country, ultimately win the day.

† For accounts of the collections formed between the days of King Solomon and the end of the seventeenth century, consult tome iii of the Musei Museorum of Michael Bernhard Valentin, in folio, published at Francfort in 1714, wherein are curious engravings of many of the wonders contained in these museums. See, also Hagen (H. A.), The history of the origin and development of museums, American Naturalist, 1876, x. p. 80.

seums of this kind. The most famous of these collections was that of Ruysch, purchased in 1717 by Peter the Great, and sent to St. Petersburg. Ruysch was practically the first to prepare injected anatomical specimens for permanent preservation, and, if the stories told of his work are true, he made preparations which have never been surpassed. His museum was a very ornamental one, the bones and skeletons, being arranged in various devices, the plants in bouquets, while scattered through the whole were beautifully engrossed sentences from the Latin poets..

The most famous medical museum in the latter half of the eighteenth century was founded by Fontana, at Florence This still exists, filling a series of rooms and consist mainly of wax preparations, beautiful to look at, but inaccurate, and of little scientific value.*

During the first half of the present century a number of private collections were formed by anatomists, pathologists and surgeons. Most of these have become public collections, either by gift or purchase, and the rest have been dispersed or destroyed. There is not in existence, at the present time, any large collection of specimens pertaining to human pathology which is the property of an individual, and is at all comparable to those made by John or William Hunter, Astley Cooper, Howship, Liston or others. Commenting on this fact, Sir James Paget writes me that he does not know of any large private pathological collection, and that he believes the change to be entirely for the better.

The necessities in modern progress in anatomy, physiology and pathology, have led to the creation of medical museums in all parts of the civilized world. In most of the continental capitals these are connected with universities supported by the state. In Great Britain and in this country they are, as a rule, connected with the relative position which medicine holds in the educational machinery of the state in different countries. Where medical education is furnished by institutions directly supported by the government, the museums, which are a part of the apparatus required, are, of course, also supported by the government.

Through the aid of friends, whose kindness in replying, or in obtaining replies, to somewhat troublesome inquiries, I cannot sufficiently acknowledge, I have obtained certain data with regard to some of the most important medical museums now existing in the world, and a part of these data are summarized in the table before you. Evidently the city having the most valuable aggregate of anatomical and pathological specimens at the present time, is London, which contains the collections of the Royal College of Surgeons, of St. Thomas's, Guy's, St. Bartholomew's, St. George's and other hospitals, and of University College, the College of Physicians and others. The oldest public anatomical museum in London is probably that of St. Bartholomew's, which, in 1726, had a room set apart for the purpose under the charge of John Freke, and which received the private collection of Abernethy. The most important medical museum in the world, and the one which has exercised the greatest influence in giving direction to anatomical and pathological studies, and in serving as a model for the formation of other collection, is undoubtedly that of the Royal College of Surgeons of London, the foundation of which was the collection made by John Hunter, purchased by the government in 1799. In one sense it is not a government institution, the funds from which it is now supported not coming directly from government grants; but, in another sense, it is truly such, since the College may be

*The first use of wax models to represent pathological specimens or dissected preparations of parts of the human body is attributed to a Sicilian priest, Gætan Jules Zambo, who lived in the latter part of the seventeenth century, and who had been accustomed to make wax models of diseased or deformed hands, feet, etc., to be used as *ex votos* offerings at the shrines of certain saints. The fame of these induced a Florentine surgeon, Ricci, to visit the priest and to get him to model some pathological specimens which he furnished. A Franciscan named Desones, brought this art to France, and made many such models between the years 1703 1706 and Bianchi formed a large collection of the same kind in Italy. It was scattered after his death, and the last vestiges of it were two models representing a healthy and a diseased liver, which were to be seen in Innspruck in 1766. (Percy et Laurent, in Dict. des Sci. Méd., Paris, 1818, vol. xxxv., article "Museum.")

looked upon as an agent of the government having special charge of matters connected with medical education, as it is the principal examining body of those proposing to practise surgery in Great Britain.

The great value of the Hunterian collection lies in the breadth of its scope, which includes every branch of medical science; but it is preëminent in illustrations of human morphology and its abnormities. The museums of the great hospital medical schools are relatively richer in the department of pathological anatomy, specimens of which they have greater facilities for obtaining. Among these there is, of course, a certain amount of duplication of matters of interest; but no two pathological specimens are precisely alike, and the question discussed in the Paris school one hundred and fifty years ago, viz.: "An pro distinctis ægris ægritudines diversæ?" is one that often occurs to a curator as he examines new specimens which differ but little from those already in his collection, but which do differ in some respects, and with regard to which he must decide as to whether, upon the whole, they are worth the trouble and cost of preservation.

Edinburgh and Dublin have also each large and valuable collections pertaining to anatomy and medicine. ‖ In Paris the medical museums are those of the Faculty of Medicine, including the Musée Dupuytren devoted to pathological anatomy, and the Musée Orfila devoted to human and comparative anatomy, materia medica, natural history and instruments and apparatus.

Professor Leon Le Fort, to whom I am indebted for data with regard to these collections, remarks that a large proportion of the anatomical specimens of the Orfila museum come from candidates who take part in concours opened for positions connected with the anatomical teaching of the faculty—such as prosectors, demonstrators, etc., each candidate being required to furnish from ten to thirty specimens.

The medical museums of other European countries are connected as a rule with universities, and it is to be remembered that in these the different branches of medical instruction are each both more specialized and more comprehensive than is the rule with us. The professor of anatomy, of physiology, of pathology, has each his own building or institute, and, therefore, each his own museum; and unless this fact be held in view, comparisons between Continental and English, or American, medical collections may give very erroneous results.

With regard to the museums connected with American Medical Schools I will say little, referring you to the table and appended notes for such data as I have been able to collect. I am aware that in so doing I put aside a splendid opportunity to enlarge upon the general superiority of all these collections and the peculiar excellences of each, but I think that you all know as much about these as I do and there is time only for details with regard to the one American Museum in which I am specially interested. I will say only that the best museum connected with a medical school in this country is the Warren Museum in Boston, and that the history of the collections of wax models, upon which several of our museums have expended large sums of money, is very instructive as to how not to do it.

So far as mere number of specimens is concerned our own national medical collection is one of the eight largest in the world, and is increasing more rapidly than any other.

This collection, known as the Army Medical Museum, owes its inception to Dr. Wm. A. Hammond, one of whose first acts after becoming Surgeon-General, 1862, was to issue a circular stating that "as it is proposed to establish in Washington an Army Medical Museum, medical officers are directed diligently to collect and to forward to the office of the Surgeon-General, all specimens of morbid anatomy, surgical or medical,

‖ I am indebted to Sir James Paget for the information given with regard to the greater number of the British museums. I had originally intended to attempt to obtain such data only from four or five of the largest: but on sending my little list of questions to Sir James he took such interest in the matter as to send a copy of these queries to a number of other museums with the request that they might be answered.

which may be regarded as valuable; together with projectiles and foreign bodies removed, and such other matters as may prove of interest in the study of military medicine or surgery."* By the end of the year over a thousand specimens had been collected, and the catalogue printed in 1866 showed that it contained 7716 specimens. It is not my purpose in this address to trace the history of its development; that must be done elsewhere. It has recently been placed, with the Library, in a conveniently arranged fire-proof building, and on the first of July last contained over 15,000 specimens besides those contained in its microscopical department, divided as follows:

Comparative Anatomy . .	1,689
Pathological	8,354
Medals	384
Microscopical specimens . .	10,416
Normal Human Anatomy .	2,961
Instruments and Apparatus	814
Microscopes	141
Miscellaneous	835

Besides these there are 375 specimens pertaining to normal human anatomy and 726 to pathological anatomy, which are in what is called the provisional series.

It is not, however, by number of specimens that the importance and value of museums of this kind can be judged; and in this case such a comparison would give an exaggerated and erroneous idea of the value of this collection. My object in this address is not to boast of what we have, but to indicate what we want; to point out what a National Medical Museum, arranged to meet the wants and interests of this country, should be, should have, and should do, and to suggest some of the ways in which this is to be brought about.

At first the Army Medical Museum was limited to military medical subjects, but of late years its scope has been greatly broadened, and is now nearly the same as that of the Royal College of Surgeons. It includes human anatomy, physiology, pathology, somatological anthropology, instruments and apparatus, and illustrations of methods of teaching connected with special departments of practical medicine. It does not at present include hygiene or materia medica, except in their immediate relations to the military medical service, and this for reasons which will be stated presently. That our National Medical Museum should be broad and comprehensive in its scope there can be no doubt, its requirements in this respect being quite different from those of collections formed and used more especially for the purpose of teaching medical students. The most practically valuable of these last are those formed by individual professors to suit their own specialties and methods of teaching. They need not, as a rule, be large. I may even say that they should not be large; for the labor of properly preserving a large collection is great, and the student, with his limited time and want of knowledge of what to look for, can examine but few specimens so as to profit by them. For the same reason specimens of rare abnormities, of double monstrosities, etc., are of little use in ordinary medical teaching as given in this country, and are not specially desirable in the museums of our medical schools.

You may have noticed that, in speaking of the scope of our museum, I said it included "human anatomy." This phrase does not mean that it has no specimens illustrating the structure of other animals,—for it has many, and needs many more; but it means that in this department its main purpose is not to make comparative anatomy an end to itself by exhibiting all known variations in structure throughout the animal kindom as a basis for their study in relation to development and environment, causation and results. In other words, it is not an anatomical museum but a medical museum. The broad field of general biology, including natural history and comparative anatomy, will ultimately be covered by the National Museum, and in our medical collection it will be quite enough to illustrate human anatomy fully, using so much of the structure of the lower animals as will be useful in explaining why certain

* Circular No. 2, Surgeon-General's Office, Washington, D. C., May 21, 1862.

parts of the human body are thus, and so, and not otherwise. No sharp line of distinction can be drawn between the field of work of the general, and that of the medical museum. So far as morphology is concerned, they must necessarily overlap somewhat, since both want a certain number of the same specimens although using them to illustrate different points of view.

The medical museum should possess a series of specimens showing the normal anatomy of the domestic animals, or of animals used in experimental pathology, pharmacology or physiology as a basis for comparison with abnormal or pathological specimens derived from the same animals. It is in the section of embryology, illustrating laws of heredity and development, that specimens from the lower animals are most interesting, and this is especially the case in the study of human abnormities and monstrosities. It is quite possible that to some anatomists it may seem that no limitation should be placed to the scope of the museum in this direction, for it is easy to trace some connection between any variation in structure in any animal and some structure, normal or abnormal, in man, but limitation is placed, with reference to the work of the National Musem, so as to secure the best results.*

The kind of specimens most valued for illustrating anatomy in a museum is now very different from what was sought for in the first half of this century. Dried and varnished dissections showing blood-vessels, etc., are now looked on as nearly useless, and are kept only as historical relics. Elaborate dissections under alcohol, mounted in opaque dishes, with flat glass covers, and sections of frozen bodies, similiarly mounted, are what the student and the practitioner most desire to see. In our museum there are some excellent specimens of this kind, prepared under the direction of Professor His, of Leipzig, of Professor Cunningham, of Dublin; and by our own anatomist, Dr. Wortman. These, however, are only samples to show how the work should be done. We require several hundred such specimens to illustrate properly regional anatomy in relation to age and sex, while the possible applications of the same methods to the illustration of visceral displacements, hernias and deformities of all kinds are boundless. As regards physiology, but little can be done by museum specimens to illustrate function as distinguished from form and structure. The so called physiological series in the Hunterian collection, is a series of organs illustrating variations in different families of the animal kindom or at different ages; in other words, it illustrates ontogenic and phylogenic development. The things students or teachers of physiology are most anxious to see in a museum are specimens of instruments and apparatus employed in experimental physiology, or in the measurement of special work of different organs, or in illustrating lectures on physiology. Illustrations of results obtained in experimental pathology often belong quite as much to physiology; as, for example, specimens of results of Gudden's atrophy method.

The Army Medical Museum has only a beginning of such an anatomical collection as I have indicated as desirable. Like all other museums, it is richer in specimens illustrating osteology than in any other branch of anatomy, simply because such specimens are the easiest to obtain and preserve. We are accustomed to think that human anatomy is nearly exhausted as a field for original research, and that, at all events, every important organ or muscle or nerve has been figured, described and named. Granting this, so far as the adult is concerned, although it is by no means true even for him, we have still to study the development of each of the organs or groups of organs, as seen at different ages, and, for some of them, in different races. As fast as these points are seen to be of practical interest, either in connection with diagnosis or the surgical treatment of disease, they are investigated; but an ideal museum should

*In the great majority of medical schools in this country anatomical teaching has a much more limited field than in German universities, and our professors of anatomy, following English traditions, are usually in training for surgery. We have, however, several who are devoting their entire work to anatomy in the broad sense, and for its own sake, and it is in this direction that progress will be made.

furnish the investigator the means for his researches; and it must, therefore, collect specimens without special regard to what is at present known to be their practical interest. The collection of such series of specimens of each joint, region and organ, as I have in mind, including sections and dissections at different ages from the earliest appearance in fœtal life te extreme old age in man, and in many cases in the lower animals, is a slow process. Such specimens, and especially such series of specimens, can only be prepared by a skilled anatomist, and there are few such; hence, the formation of our ideal anatomical collection, limited though its scope may be, must be a work of time.*

There is ample material and scope for original work for half a dozen skilled anatomists for many years to come to supply the demands of this museum for illustrations of human morphology in its various relations, and it is not desirable to scatter effort over too wide a field.

(*To be continued.*)

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

The Congress met for organization at 1 o'clock in the main hall, Grand Army Building. It was purely a business meeting, and on this account it was termed by the committee "the preliminary meeting." It was an interesting occasion, because practically the Congress of American Physicians and Surgeons then for the first time came into existence.

DR. WILLIAM PEPPER'S ADDRESS.

Dr. Pepper, of Philadelphia, the chairman of the executive committee, called the congress to order and spoke as follows:

"On behalf of the executive committee I have the honor to announce to you, the members of the various special associations composing the congress of American physicians and surgeons, the manner in which we have discharged the responsible duty entrusted to us. The present meeting is the result of prolonged deliberations. The development of one special society after another showed the irresistible tendency of the recent progress of medical science. The deep interest which attaches to the meetings of these separate bodies suggested naturally the thought of a conjoint meeting, which would bring together the active workers in allied fields. This thought began to take definite shape as much as four years ago, before the attention of the medical profession became occupied with the preparations for the meeting of the International Medical Congress which occurred in this city last year. But all action was deferred, in order that there should not be even the semblance of interference with that important meeting. The delay has not been injurious. It has rendered more than ever conspicuous the actual need of an organization to secure the reunion, at stated intervals, of the more active teachers and writers and workers in the leading branches of medical science. Such reunions must be at a locality to which it will be possible to draw such men from all quarters.

"In order to produce the best scientific results, it is essential that the members in attendance shall be reasonably limited and that as far as possible the same men shall attend successive meetings. A continuity of intellectual life and activity is thus secured, which increases greatly the benefits derived from these meetings. A large proportion of those interested in the development of such an organization are, as I am myself, warmly attached to the American Medical Association, and determined to exert their influence to maintain and promote the success of this great national organization. All are no less warmly interested in the prosperity of the various special societies to which they severally belong. Your executive committee found little difficulty, however, in deciding upon a plan which would avoid even the least interference with the American Medical Association,

*As Sir William Turner remarks: "Where a question in human embryology hinges upon an examination of parts in a very early state of development, we have often to wait for many years before an appropriate specimen falls into the hands of a competent observer."

while at the same time it avoided any encroachment upon the independence and autonomy of the special societies. It is unnecessary to dwell upon the special points which have been embodied in the by-laws which will be immediately submitted to you.

SESSIONS TO BE TRIENNIAL.

"Your committee ventures to hope that these provisions, which are strictly in accord with the terms of the resolutions under which they were appointed, will meet the unanimous approval of the congress. We have recommended that the sessions shall be triennial, thus leaving to each participating body two intervening independent meetings, at such time and place as may be chosen. We have jealously guarded against the admission of any parliamentary business into the work of the congress, the functions of which are designed to be absolutely and exclusively scientific. Thus, and thus only, can the sessions of this body be lifted up into and maintained in that high and cool air of learned discourse which best permits the diffusion of truth and the promotion of science. We have no less jealously guarded the independent sovereignty of each participating society. To all their full rights are preserved; to all equal privileges are accorded; upon all the burden of expense, which should always be but a light one, has been laid in equitable distribution. The successive meetings of the congress will be held

IN THIS BEAUTIFUL CITY

which every year renders more accessible, more attractive and more precious to every citizen of the republic. Nor could we fail to make acknowledgment of the great material advantages we shall enjoy in these meetings here, through the liberal and enlightened policy which places freely at our disposal the admirable facilities of the medical department.

"Here, too, your executive committee would gladly acknowledge, we have found colleagues in the members of the committee of arrangements, to whom, and especially to whose chairman, Dr. S. C. Busey, we desire to return cordial thanks for a zealous and harmonious co-operation which has contributed in very large proportion to the successful inauguration of this new organization.

HOW THE PRESIDENT WILL BE CHOSEN.

"And lastly, your executive committee would report that in the discharge of one of the most important of our duties we have reached the conclusion that the selection of the president of each congress shall be entrusted to the executive committee then in office. Thus will the choice of the most worthy and most representative men of the whole country be ensured at the hands of a truly representative body, specially selected by their various societies for their ability and judgment. The powers you are asked to confide to future executive committees are large, but they will be reposed in safe hands. Each society participating will be stimulated to continuous and lofty effort. Membership in any of these bodies will come to be regarded as more and more an honor, and in time the scientific qualifications of candidates will be more and more strictly scrutinized. Can there be any doubt that if the spirit which has led to the formation of this congress be maintained and cherished, this new organization will exert a powerful and beneficent influence on the future medical science. It remains then only to add that in exerting the privilege of selecting a president for this first Congress of American Physicians and Surgeons, your executive committee feel they have been guided to the choice of a man whose admirable personal character, whose high attainments, and whose illustrious services in the cause of literature, of science, and of the entire medical profession, mark him as entitled to this great honor and distinction. It gives me, therefore, the utmost gratification to present to you our president, Dr. John Shaw Billings, and to announce that the Congress of American Physicians and Surgeons is now duly organized."

THE FIRST PRESIDENT.

Dr. Billings then came forward, and in a few words expressed his appreciation of the honor which had been conferred upon him in his selection for the important position of president of the congress.

Dr. Billings introduced Dr. S. C. Busey, the chairman of the committee of arrangements, who made an address of welcome.

RULES OF ORGANIZATION.

Dr. Busey's address was warmly received, and upon its conclusion Dr. Pepper, from the executive committee, submitted the following rules of organization, which were adopted:

1. This organization shall be known as "The Congress of American Physicians and Surgeons."

2. It shall be composed of national associations for the promotion of medical and allied sciences.

3. It shall hold its sessions triennially in the city of Washington, D. C.

4. The officers of the congress shall be a president, vice-president, a secretary, and an executive committee.

5. The president shall be elected by the executive committee, of which he shall be *ex-officio* a member.

6. The presidents of the participating societies shall be *ex-officio* the vice-presidents of the congress.

7. The secretary and the treasurer shall be elected by the executive committee. They shall be *ex-officio* members of the executive committee.

8. The executive committee shall be composed of one member from each participating society, and said members shall be elected by the various societies at the next annual meetings subsequent to the congress.

It shall be charged with all duties pertaining to the organization of and preparation for the ensuing congress, including the election of all officers and of a committee of arrangements.

It shall superintend the publication of the transactions of the congress.

9. The expenses of the congress shall be divided between the participating societies in proportion to their membership.

10. The admission of new associations to participation in the congress shall be by unanimous vote of the executive committee.

The various associations forming the congress then held their sessions and in the evening a joint discussion on

INTESTINAL OBSTRUCTION IN ITS MEDICAL AND SURGICAL RELATIONS

was discussed by Drs. Reginald H. Fitz, of Boston; Nicholas Senn, of Milwaukee; Messrs. Durham and Ord, of London, and Annandale, of Edinburg.

Primary Syphilis of the Tongue.—E. O—, a sailor aged forty-five, consulted me on March 4th for a sore on the tongue. On examination, a hard, indurated mass about the size of a filbert nut was felt in the middle third of the organ on the left side. It was ulcerated on the surface and sides, the palate and gums were covered with mucous patches. The cervical submaxillary, inguinal glands were enlarged, and on the following day a copious papular rash appeared, extending from the scalp to below the knees.

The initial lesion of syphilis on the tongue is, I think, rather a rare occurrence, especially so far back as this. The man strongly resented the idea of having contracted it from his fellow-sailors, nor, as far as I could ascertain, were there any others on board suffering from primary or secondary syphilis. He admitted connexion in the ordinary way on Dec. 8th, 1887, two days before leaving London, and first noticed the sore three days after arriving at Calcutta—on Feb. 7th, 1888—and had never been on shore after leaving home. If he contracted it on Dec. 8th this would give a very long incubation period of sixty-one days, so I am still inclined to think he was infected through using a common pipe or in some similar manner from someone else on board.

All the symptoms are improving under the usual mercurial treatment.—*J. Bell, Lancet.*

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BALTIMORE, SEPTEMBER 22, 1888.

Editorial.

THE RECENT CONGRESS ON TUBERCULOSIS.—If any fact illustrates the widespread interest which is taken in the study of tuberculosis, the Congress held in Paris from the 25th to 31st of July for the consideration of this disease must be taken in this light. The object of this Congress, it was affirmed by the president, M. Chauveau, was to awaken the profession out of the false security of believing in the innocuity of tubercle and to recognize the grave possibilities of its transmission from animals to man. The unanimous voice of the Congress was in support of the contagiousness of tuberculosis, and the belief in the dangers to the human race arising from the consumption of the milk and flesh of tuberculous animals, was affirmed by every speaker who took part in the discussion. Resolutions were adopted by the Congress urging the importance of hygienic precautions with the view of preventing tubercular contagion from the use of the milk and meat of tuberculous animals, and urging that measures be taken for the disinfection of materials derived from phthisical patients. The Congress went so far as to affirm that the chief means of prevalence in mankind of tuberculosis is by communication from animals of the bovine class, though the evidence in support of this view is not conclusive. That tuberculosis exists largely among animals of the bovine species every one must admit, and that the flesh and milk of these animals may assist in the dissemination of tuberculosis cannot be denied, still it is far from being proven that this is the chief or highly important factor in the spread of tuberculosis as the conclusions of the Congress would make believe. We are far from a wish to combat the views expressed by the Congress and would record a belief in the assertion that impure flesh and milk may assist quite largely in disseminating tuberculosis. The clinical evidence in support of this view is quite strong and constantly increasing. It is, therefore, a timely warning from the Congress when it recommends the inclusion of tuberculosis in the list of contagious diseases of animals and urges the seizure and destruction of the flesh of every tubercular beast, no matter what may be its appearance. The difficulties in the way of checking the sale and consequent use of articles of food derived from tuberculous animals is quite apparent. The suggestion that the State should indemnify the owners for the losees they sustained by the adoption of the stamping out method is equitable, yet the difficulties are more real than at first sight might be supposed. The experiment is at least worthy of trial and it is to be hoped that a practical test will be applied in France where the conditions are more favorable than in a country such as this.

The practical value of the work of the Congress is not only found in the claim which it raises in regard to the use of food from tuberculous animals, but is the strong support it gives to the theory of the contagiousness of phthisis and the important practical results which may follow from a belief in this doctrine. If phthisis is communicable to the extent now held by leading authorities upon this subject the practice of to-day is faulty in many respects and there is vast room for improvement in the methods of dealing with tubercular patients.

Not only is it important that we should be general in the use of food which may contain the germs of tuberculosis, but equally important is it that safeguards should be thrown around tubercular cases so that they may not become the propagators of their own malady. Their clothing, food, secretions and surroundings play a rôle in the communication of tuberculosis to others, and their avenues should be guarded with care and circumspection.

The Poisonous Effect of Cigarette Smoking.—Once more the subject of cigarette smoking and its effect are made the subject of elaborated experiment. Dr. Wm. L. Dudley (*Medical News*, Sept. 5th, 1888) has made careful test with cigarettes, cigars and pipes, and from the study on the lower animals concludes that the poisonous effect of the cigarette smoke when inhaled is the principal cause of the poisonous result. He thinks that inhaling smoke from a pipe or cigar would produce exactly the same injurious results. The poisonous element in the smoke is the carbon monoxide which is so extremely poisonous because it has such a strong affinity for the hæmoglobin of the blood. This seems to be the clearest piece of work on cigarette smoking yet brought before the public and may help many a physician to explain to fond parents and interrogating sons exactly why cigarette smoking is harmful without blaming the brand of cigarette. Dr. Dudley's conclusions, as drawn from his experiments, are as follows:

1. That carbonic oxide is the most poisonous constituent of tobacco smoke.

2. That more injury results from cigarette than cigar- or pipe-smoking, because, as a rule, the smoke of the former is inhaled.

3. That cigarette smoking without inhaling is no more injurious than pipe- or cigar-smoking.

4. That the smoke of a cigar or pipe, if inhaled, is as injurious as cigarette smoke inhaled.

5. That the smoke from a Turkish pipe, if inhaled, is as injurious as that of a cigarette inhaled.

The Congress of American Physicians and Surgeons.—With the close of this week there has ended the first triennial meeting of the Congress of American Physicians and Surgeons—a body composed undoubtedly of the strongest medical men of this country—men who met in the fullest harmony to discuss scientific subjects. It is not easy in a limited space to give our readers a fair idea of the enormous amount of work done. The different associations held their morning and afternoon sessions at the same time in different places while each evening was devoted to special subjects for report and discussion. The address of Dr. D. Hayes Agnew is given in full while abstracts and echoes from other meetings are added, giving in all a very fair idea of the large amount of work done in those few days. This city was well represented at the Congress by the following members: Dr. Christopher Johnston, Dr. L. McLane Tiffany, Dr. J. Edwin Michael, Dr. John N. Mackenzie, Dr. Frank Donaldson, Dr. J. H. Hartman, Dr. Samuel Johnston, Dr. W. C. Van Bibber, Dr. William H. Welch, Dr. Samnel C. Chew, Dr. Wm. T. Councilman, Dr. F. T. Miles, Dr. Sam'l Theobald, Dr. I. E. Atkinson, Dr. Geo. M. Rohé, Dr. R. B. Morison, Dr. H. Newell Martin, Dr. H. H. Donaldson, and Dr. W. H. Howell.

Miscellany.

Hemorrhage from the Palm.—My experience with hemorrhage from wounds of the palmar arches is that it is usually controllable by maintaining extreme elevation of the hand. This is most throughly effected, and with the least discomfort to the patient, by vertical suspension of the limb, the attachment being made along the palmar and dorsal surfaces of the forearm by adhesive strips, after the ordinary manner of making ex-

tension in the treatment of fractures. A cord from the adhesive straps may be fastened to the top of a bed post, or other convenient elevated point.

If posture alone should not arrest the hemorrhage, the most effective compression can be made by placing in the palm of the hand an india-rubber ball, or a ball solidly made of cotton wadding, and on this the fingers and thumb should be closed and bound tightly with a roller bandage.

Using these expedients I have never been obliged to ligate arterial trunks for the arrest of hemorrhage from the palm of the hand.—*Medical and Surgical Reporter, Dr. R. J. Levis.*

Varicocele in the Female: What is Its Influence on the Ovary?—Dr. Palmer Dudley sums up an article on the above subject (*New York Medical Journal*) with these conclusions:

1. It is my belief that varicocele in the broad ligament is not a rare condition.

2. That it is produced by long-continued congestion; arrest of uterine involution, from whatever cause, and chronic constipation being the most important factors in its production.

3. That it may exist and be mistaken for so-called cellulitis or salpingitis unless careful rectal examination of the broad ligament is made.

4. That it will produce changes in the structure and function of the ovary similar to those produced in the testicle, causing atrophy of its stroma, and interference with the proper development of the ova to such an extent as to produce cystic degeneration of it and consequent sterility.

5. That when the varicocele has existed for some time, or for a sufficient length of time to have caused a permanent dilatation of the veins, local treatment by counter-irritation (with Churchill's tincture of iodine), cotton tamponing, pessary support, or local depletion will be of no permanent benefit.

6. That the result of a radical operation for its removal in the four cases reported, although not sufficient to make the operation a justifiable one in all cases, is strong evidence in its favor, even though the woman has passed the menopause.

Modern Cardiac Therapeutics.—Eichhorst ("Ctrlbl. für die ges. Ther.," March, 1888), in a very practical paper, gives some valuable hints regarding the more modern remedies in affections of the heart. Digitalis, he says, still holds the first place among these. It is of great practical importance that the remedy be given in conjunction with or immediately after alcoholic stimulants and excitants. Especially is this the case when marked cyanosis exists. Digitalis in those cases has no effect until the vagus center is stimulated by the administration of alcohol. When a quick effect is desired, the drug in the form of powder should be employed. In certain forms of kidney disease the powder may prevent threatened attacks of anæmia. The powdered digitalis-leaves are very much increased in potency by the addition of calomel, not only in the dropsies of heart affections, but also in that occurring in emphysema, marasmus, and in liver disease. The author thinks that the cumulative effect of the remedy is exaggerated. He has given it for months without noticing any such effect.

Next to digitalis, according to the author, stands strophanthus. Comparing the two, he says that digitalis is quicker and more certain in its action, but that strophanthus has the advantage in showing no tendency to cumulation, and does not seem to lose its effect by long-continued use. Eichhorst has found strophanthus more efficacious in some cases than digitalis, especially in a case of exophthalmic goître and in one of long-standing ascites. Sulphate of sparteine stands low in the list after the two foregoing drugs. It seems particularly applicable in cases of cardiac asthma. Next come preparations of caffeine, which have the advantage over the last-named drug from their diuretic properties. *Adonis vernalis* and *Convallaria maialis* have but very slight effect on the heart, and are uncertain diuretics. In addition, they are likely to cause nausea and vomiting.

Regarding Oertel's method the author expresses himself as follows: In all forms of cardiac weakness it is advantageous to diminish the quantity of fluid ingested; the amount of fluid allowed should always be in proportion to the quantity of urine excreted. In reference to bodily exercise one should observe the greatest caution. Violent exercise may cause overdistension of the heart, and consequent suddent death. This is especially likely to happen in cases of fatty degeneration of the heart muscle. On the other hand, in cases of retarded action of the heart, from the accumulation of subpericardial fat, methodical exercise is advantageous in freeing the heart from its mechanical burden.—*N. Y. Med. Journal.*

Treatment of Aneurisms by Iodides and Antipyrin.—At the Académie de Médecine M. Sée produced a paper on the treatment of aneurism by iodides and antipyrin. Seventeen cases were brought forward to confirm the efficacy of the treatment and in all a marked decrease in the size of the tumour was observed, and the oppression, sense of suffocation, laryngeal dyspnœa, accompanied by aphonia, derived from pressure on the recurrent nerve, entirely disappeared. All these happy results M. Sée did not hesitate to attribute to the iodide of potassium. The iodide of sodium, contrary to the opinion of Dr. Huchard, was not as good as the iodide of potassium. As to antipyrin, the learned professor found that it rendered the impulse of the heart more calm, and thus permitted the blood to complete its coagulation in the sac, and further, the painful sensation of tightness so often experienced by patients afflicted with this affection was known to be completely relieved by its use.—*The Med. Press.*

Artificial Fecundation.—Since the Abbé Spallanzini, in 1767, fecundated bitches, and Hunter, later on (1799) succeeded in rendering a man with hypospadias a happy father, the operation of artificial fecundation has passed through many different experiences, which has brought it more than once before the tribunal of both public opinion and the laws of countries. Eight years ago a married couple in Bordeaux, despairing of having a family, consulted a doctor Lajatre, who, by circulars spread about the country, pretended to render sterile marriages fruitful by a special operation. The doctor performed the operation, but no such result followed, and his clients refused to pay him the fee demanded—£60. He thereupon summoned them before the magistrate, but this worthy representative of the law, after listening to the explanations of the doctor, which, by the way, were very minute, all the details of the operation being entered into, not only dismissed the case, but fined the plaintiff for revealing professional secrets. Further, the magistrate gave it as his opinion that artificial fecundation was repugnant to the laws of nature and a positive social danger, and that such procedures should not be put into practice. This verdict was taken up by the Society of Legal Medicine, as it is called in France, and the President (M. Brouardel) said that the operation might be performed where, after other means had failed, no reasons were found in the man or the woman to account for sterility. Encouraged by this declaration, M. Lajatre came up to Paris, where he advertised in the daily papers his method of procuring families. It will be remembered that the Paris Faculty refused to accept a thesis on this subject presented by a student called Gérard. Last year a sort of company was got up in the capital, sending, broadcast, pamphlets entitled *Do Vitam.* A large apartment was hired in the Chaussée d'Antin, a doctor was engaged to do the operation, and for a time all went on well. Disappointed husbands and wives came in numbers, but some disagreement took place between the parties interested, and the whole matter has now been placed in the hands of the lawyers, from which it is not likely ever to come out.—*Med. Press and Circular.*

It has been decided by the Jewish authorities of Berlin that in the future the rite of circumcision shall only be performed by duly qualified medical men.

Medical Items.

The Massachusetts Medical Society numbers 1,690 members.

Dr. Thomas Taunton Sabine, late Professor of Anatomy in the College of Physicians and Surgeons of New York, died on August 23th, aged 47 years. As a teacher of Anatomy Dr. Sabine probably had few equals in America.

Professor von Esmarch, of the University of Kiel, an uncle, by marriage, of the Emporor William II, is in America, having come to attend the Congress of American Physicians and Surgeons at Washington.

To Preserve Instruments from Rust.—The immersion of steel instruments for a few minutes in a saturated solution of potassium carbonate, is said to be an effectual preservation from rust.—*Medical Record.*

Dr. C. W. Kollock, of Charleston, S. C., reports in the *N. Y. Med. Jour.*, a case in which he removed two apple seeds from the ear that had been there 40 years. They were encapsuled in wax and had apparently not affected the auditory canal.

The initial number of a new weekly medical journal, to be called *The Illustrated Medical News*, is announced to be published in London on September 29th. Its distinctive features will be an original colored plate with each number, and numerous woodcuts in illustration of the text.—*Medical News.*

The charge of inexperience is not necessarily confined to the beginner; it applies equally to many an old practitioner, whose errors have grown and increased in strength during a long series of years, because, from defects in his original education, from the absence of a properly directed clinical instruction, he commenced practice without having previously acquired the habit or power of accurate observation.—*Graves.*

Horseflesh as Meat.—From time to time Manchester is made aware that horse-flesh is undoubtedly consumed by some of us, possibly as "prime ribs" or "rump steak," for no one can ever find any labelled "horse beef" at any of the butchers. Two cases lately before the court were there only because the flesh was diseased and unfit for human food, and then the fact came out that it was the flesh of a horse and not of an ox that had been got ready for sale as beef.—*Lancet.*

Suppose an unvaccinated person to inhale the germ of small-pox on a Monday; if he or she be vaccinated as late as the following Wednesday, the vaccination will be in time to prevent small-pox being developed; if it be put off until Thursday, the small-pox will appear, but will be modified; if the vaccination be delayed until Friday, it will be of no use; it will not have had time to reach the stage of areola, the index of safety, before the illness of small-pox begins.—*Medical World.*

Schatz, of Rosbock, has had astonishing results in the relief if congestion, inflammation, and hemorrhage from the uterus, since using the American preparation of Hydrastis Canadensis. It does not cause "pains" but only blood-vessel contraction. He reccommends it especially in the profuse menstruation of young virgins and of uterine fibroids. In one case after two years use, a fibroid which had risen to the umbilicus disappeared into the pevis.

Curiosity has been greatly exercised by people of late as to the amount of the fee likely to be received by Sir Morell Mackenzie for his professional attendance on the last Emperor. The very latest report, which of course contradicts all others, is that a fee equal in English money to about £75 a day is to be his remuneration. The Emperor is not the only patient he has had in Germany, some of his English patients even have traveled thither for consultation.—*London Letter.—Am. Prac. and News.*

The American Anatomists.—The Association of American Anatomists was organized Monday, September 17, 1888. The following officers were elected. President, Dr. Joseph Leidy, of Philadelphia; vice-presidents, Dr. Frank Baker, of Washington; Dr. F. D. Weisse of New York; secretary and treasurer, Dr. A. H. P. Leuf, of Philadelphia; executive committee, Dr. Harrison Allen, of Philadelphia; Dr. Burt G. Wilder, of Ithaca, N. Y., and Dr. A. C. Berneys, of St. Louis, Mo. Papers were read by Dr. Harrison Allen on a "Bipartite Condition of the Malar Bone in the North American Indians;" by Dr. A. C. Bernays on "Some Points in the development of the Valves of the Heart," and by Dr. J. L. Wortman on "The Condition of the Hyoid bone in some Prehistoric Indians."

The Pediatric Society.—The American Pediatric Society was organized at the Arlington Hotel, Tuesday, September 18th, 1888. It comprises, at present, thirty-six physicians who have devoted time to the special study of the diseases of children. Officers were elected as follows: President, A. Jacobi, New York; first vice-president, A. V. Meigs, Philadelphia; second vice-president, F. Forcheimer, Cincinnati; secretary, W. D. Booker, Baltimore; recorder, Wm. Perry Watson, Jersey City. Council, T. L. Latimer, Baltimore; J. M. Keating, Philadelphia; J. N. Love, St. Louis; J. H. Ripley, New York; S. C. Busey, Washington; C. P. Putman, Boston, and A. D. Blackadar, Montreal. Delegate to the congress, Dr. A. Jacobi, New York. A constitution was adopted and the meeting ajourned. There will be no further meetings of the society during the present congress.

Original Articles.

PRESIDENT'S ADDRESS.

ON MEDICAL MUSEUMS, WITH SPECIAL REFERENCE TO THE ARMY MEDICAL MUSEUM AT WASHINGTON.*

BY JOHN S. BILLINGS, M.D.,
Surgeon U. S. A.

(*Continued from page*, 413.)

The pathological section of a medical museum is its main feature, being, as Mr. Flower remarks, the section to which, in the eyes of Hunter and his successors, all others form merely the introduction. It is true that to some physicians specimens in this department seem to have little value; but they are balanced by those physicians whose chief interest in a case of disease is to get a post-mortem. No doubt much of the ancient pathology, and some of that which is quite recent, is comparable to the looking in the dark for a black spot which is not there, but those who despise pathology, and devote their entire attention to symptoms and treatment, err as much on one side as those who talk and act as if a knowledge of pathological anatomy could take the place of clinical experience do on the other. I do not know, however, that the doctrine usually preached, viz., that each man should attain the just mean in his views, is a true one. Certainly it is not the principle on which the universe seems to be constructed; the balance is maintained, not by having everything exactly symmetrical, but by excess in one direction balancing excess in another.

To secure pathological specimens in their most instructive forms for museum purposes requires, in many cases, not only considerable variation from the usual routine methods of post-mortem examinations, but very considerable delay in ascertaining the results. If, for example, we wish the best specimens of the results of cerebral disease, the brain must not be removed and sliced up in the usual manner; it should be hardened *in situ* to a certain extent, and its sections should be carefully considered with reference to their preservation in their relations to each other before they are actually made. There is need of a treatise by a skilled pathological anatomist giving such methods in detail from the modern point of view.

Thus far, the great majority of contributions of pathological material to our museum have been made by army medical officers; but some of the most valuable specimens have come from practitioners in civil life, and it is to these last that we must appeal for illustrations of the effects of disease in all parts of the country. There are difficulties in the way, of course. The physician in private practice does not make post-mortem examinations in five per cent. of the deaths of patients under his charge, and when he does come into possession of an interesting specimen he is very naturally inclined either to keep it himself, especially if it is an osteological one which can be preserved with little expense or trouble, or to put it in the little collection which has been formed at the dispensary, or asylum, or hospital. I hope, however, that when it becomes known that we are trying to form in Washington a complete medical museum for the benefit of the whole medical profession, and that we have the means of permanently and securely preserving, and exhibiting to to best advantage the specimens sent to us, I say that I hope and believe when this is understood many physicians will be willing to take a little trouble, and to give up something of their very natural impulse to keep a trophy of their skill, or a curiosity to talk about, in order to promote the general good.

As a rule, single specimens of abnormity or of disease have little scientific value; it is only when they are associated with others that they both furnish and receive light. To this audience it is unnecessary to give other reasons as to why physicians should contribute material to the national collection, nor as to why the curator of this collection is justified

*Read before the Congress of American Physicians and Surgeons, at Washington, September 20, 1888.

in being very bold in requesting such material; but there is one objection to parting with certain specimens which is sometimes made, and to which I will refer, because it brings up one of the ways in which our ideal medical museum can meet a practical need of the family practitioner. The objection I refer to is, that the specimen may be important from the point of view of medical jurisprudence; that it has a special bearing in certain suits for malpractice, etc., and that, therefore, the owner wishes to keep it to be used as testimony to protect himself or his neighbors. There is some truth in this; but it is also true that such specimens brought together in the national museum would be just as available as ever for the protection of the rights of the individual physican, while they would also be available for the benefit of the whole community.

Whether the specimens preserved are, or are not, desirable for and useful to the museum, it is certain that the securing and forwarding them is a very useful thing to the physician. It tends to keep him in touch with current living thought and work of the profession, to direct his attention to the connection between symptoms and the mechanism of their production, which is often so important in deciding on the remedy to be used, and, above all, it gives him an interest in other men's work, and thus broadens his views and increases his knowledge and pleasure.

Having obtained the specimens, the next difficulty is so to prepare and preserve them that they shall be available for study. The great majority cannot be preserved in such a manner as to retain their natural color, size and texture. No doubt more might be done in this direction than is usually done. It is possible to stain or paint portions of specimens in such a way as to give some idea of the normal appearances, but thus far, I think, experience shows that the best medium for the permanent preservation of wet pathological specimens is alcohol, and this will contract and harden most tissues, and remove the color from nearly all. It is also an expensive mode of preservation for large collections, and requires constant care to prevent the effects of evaporation. It does not follow, however, that such specimens are of little value, and that, as some have urged, it would be better to seek to obtain records of the results of disease by colored drawings or models. The pathological specimens, whether seen at the post-mortem, or years afterwards in a museum, is, to the scientific pathologist or the practical physician, merely a sign or hieroglyph of the morbid process which has produced it; it is a result, in most cases, of interest not in itself, but because of the preceding phenomena which it connotes. As Sir James Paget has said, the same objection, viz., that museum specimens are unfit for the teaching or the study of pathology, might be made to the study of botanical specimens in an herbarium. "In both cases alike, the charges produced by preparation are so far uniform that any one accustomed to recent specimens (and no others should study either herbaria or pathological collections) can allow for them or 'discount' them. Just as an anatomist can discern, in a recent specimen of disease, the healthy structure; so, but often much more clearly, can the pathologist or any careful student discern in the prepared specimen the chief characteristics of the disease.* Colored drawings, casts and models are of great value in supplementing original specimens, but they cannot wholly replace them.

A good preparation, whether of normal or abnormal structure, but especially the latter, is valuable, not only for what we can see in it, but also for what we overlook or misinterpret, and which our successor may see, and see rightly. In this it is better than a mere description, yet the latter is equally necessary and much more easily preserved and made generally useful. Next to the preparation itself in accuracy and completeness of record is the photograph,

*British Medical Journal, 1880, ii.

and next is a good model, or a careful drawing.*

In medical and surgical matters, as in most other things, we habitually think in terms of vision as interpreted by touch. Hence, in part, the importance of the so-called object-teaching, and the fact that what the medical lecturer shows his class will usually be much better remembered and understood than what he says to it. And, while pictures and diagrams are of great assistance they are by no means as instructive and suggestive as representations in three dimensions, *i. e*, models, if the thing itself is not available.

One of the most important sections of our museum is that devoted to microscopy, including normal and pathological histology, and photomicrographic work. In the cabinets there are nearly 11,000 mounted specimens, illustrating almost every field of microscopical research. Many of these were made twenty years ago and more, and were mounted by processes which have not given good results, so that Dr. Gray, who is in charge of this section, estimates that about 3000 will be set aside as worthless; but the rest form a very valuable series to which additions are being constantly made, and materials for which we are specially anxious to obtain. In connection with this section a series of chromogenic and pathogenic bacteria is kept up for museum exhibits, and also to illustrate methods of work.

While the great majority of the specimens in a medical museum have some relation to diagnosis, prognosis, or therapeutics, the number of those which are of direct interest to the so-called practical physician is not very great. It includes models and casts illustrating dermatology, morbid growths, the results of amputations, excisions, plastic operations, ets., and instruments, apparatus, dressings, etc., of all kinds. Here also may be classed hospital fittings and furniture, means of transportation for sick and wounded, model cases of instruments, emergency chests, etc. Our medical museum has a fair beginning of a collection of this kind, including over a thousand specimens; but many more are needed to make it reasonably complete. If each medical man who devises a stethoscope, a pessary, a speculum, an ophthalmoscope, or an electro-therapeutic appliance with which he is well pleased, would send a specimen to the collection, its increase would certainly be rapid, and it could always show the latest improvement.

An ideal medical museum should be very complete in the department of preventive medicine, or hygiene. It is a wide field, covering, as it does, air, water, food, clothing, habitations, geology, meteorology, occupations, etc., in their relations to the production or prevention of disease, and thus far has had little place in medical museums, being taken up as a specialty in the half dozen museums of hygiene which now exist.

Our own National Museum of Hygiene, is, as you know, under the direction of the Medical Department of the Navy. It is a very interesting collection of sanitary appliances of various kinds; but it is not well housed, is much overcrowded, and its location is so inconvenient that it receives but few visitors,and, therefore, has by no means the educational influence that it ought to have. It should be provided with ample quarters in the immediate vicinity of the National and of the Army Medical Museums, to both of which it would form a very desirable supplement. In our medical museum, at present, military hygiene only is illustrated, and this only in a few branches, such as hospitals, means of transportation of wounded, etc. As regards materia medica, an exceedingly well arranged collection, including about 5,000 specimens, has been formed in the National Museum, mainly under the direction of Dr. J. M. Flint, of the United States Navy. The relations of materia medica to natural history, com-

*To realize the value of a good drawing, one should consult the illustrations of the works of Vesalius, Eustachius and other anatomists of the sixteenth and seventeenth centuries. The dissections and preparations which they made perished long ago. It is true, that there is still in existence, at Basle, a skeleton prepared by Vesalius; and possibly a few other osteological specimens preserved by the older anatomists and pathologists may still be in existence, but, as a rule, to which there is almost no exception, we must depend on the plates of these old folios to get at the true meaning of the text.

merce, and the arts, which are subjects belonging especially to the National Museum, are as close as they are to medicine, and I am very glad that our national collection in this branch is where it is, and under its present management. In the Medical Museum we have a collection showing what is supplied in the way of drugs, instruments, etc., to the medical department of our army, and, as opportunity offers, we shall extend this to include the medical supplies of other armies or services.

The extent to, and manner in, which a medical museum should deal with anthropological and ethnological problems are not questions to be discussed in the abstract with advantage, since the answers must differ greatly according to circumstances. In our National Museums the matter has been so arranged that all material relating to anthropometry, or to real or supposed structural differences in man according to race, are cared for in the Medical Museum, while specimens illustrating manners and customs, implements, weapons, clothing, pottery, etc., are taken charge of in the anthropological division of the National collection.

The Army Medical Museum contains what may seem a large amount of material relating to human osteology, and especially craniology, in its relations to North American ethnology, or the history of the development of different varieties of man on this continent; but it is not actually half large enough to permit of drawing definite scientific conclusions from it. The majority of the crania which it contains have been measured to a certain extent, and the results have been published; but many other measurement are desirable to permit of comparison with series taken elsewhere, and even measurements already made must be repeated by later and better methods. We have been trying some experiments with composite photography and superimposed contour tracings as a means of obtaining typical outlines and dimensions for race groups of crania, and these give promise of good results. If the collections of crania of North American Indians in Boston, New York, Philadelphia and Washington could be brought together, a very much better average presentation of the majority of tribes or groups would be obtained than can be furnished by either of these collections taken separately. By composite photography and tracings, combined with uniform methods of measurement, we can practically bring these collections together, and obtain results nearly as satisfactory as if we had them all in one room. We have also fitted up one large room with instruments and apparatus for anthropometry in its widest sense, including psychophysical investigation, and it is intended to make this a complete laboratory for illustration of methods of work.

In London arrangements have been made to have such an anthropometric laboratory in an outbuilding at the South Kensington Museum. The two things have no connection, and it seems to have been placed there because it would obtain more visitors desirous of being measured and tested than if placed anywhere else. In this laboratory, which is, I believe, essentially the same sort of instiution as that arranged by Mr. Francis Galton at the Health Exhibition in 1884, and is planned by Mr. Galton, any person can have the regular series of measurements and tests made upon himself for a charge of six cents. There are difficulties in the way of making a charge for such measurements in a government establishment, and there are also difficulties in undertaking to do such work gratis, chiefly on account of the cost. It is, however, so desirable that it should be done, and the data which such observationt systematically carried on for a series of years would be so valuable, not only from a scientific point of view, but for practical purposes in connection with life insurance interests, and very possibly with practical medicine, that we should endeavor to overcome these difficulties in some way, and I think it can be done sufficiently, at least, to stimulate private enterprise in this direction. It is possible that we may yet see in large cities establishments of this kind, directed by skilled and reputable physicians having the confidence of the profession, where

not only normal but abnormal conditions can be determined; places where the secretions can be tested chemically and microscopically, opthalmoscopic and endoscopic examinations of all kinds made, the mode of functioning of muscles and nerves determined, and an authoritative record of the results made for the use of the individual, as evidence of his condition, or for the information of his physician. It would require an already established reputation and much skill and tact on the part of the director of such a laboratory, with absolute refusal to give prescriptions or advice in any shape, to make it fully successful; but it may be done.

An important feature of our national medical museum should be to show methods of research and of instruction for the benefit of the investigators and teachers of the country. This includes instruments and apparatus, and, to a limited extent, illustrations of the modes of using them and of the results; it also includes diagrams, models, etc., used for illustrating lectures. For example, as soon as Koch's researches became known in this country, physicians, and especially medical teachers who visited the museum, asked if we could show them the apparatus used by Koch and Pasteur in bacteriological work, and eagerly examined the few specimens of cultures on solid media which we were able to exhibit. The anatomist comes to the museum quite as much to see methods of mounting and preservation, as to see the specimens themselves; the physiologist does not expect to see function directly exhibited, but he does hope to find information about kymographs and constant temperature apparatus, and he wants to see whether Kühne's artificial eye is so useful for teaching purposes that he ought to get one to illustrate his lectures.

Medical museums are not, as a rule, freely open to the public, nor are they collected or arranged with reference to interesting or instructing non-professional persons. The Medical Museum at Washington is the chief exception to this rule, and it is so, because it was placed in Ford's Theatre, the scene of the assassination of President Lincoln. Many visitors to Washington, both men and women, wished to see this memorable spot, and in doing so, necessarily went through the Museum. This gradually led to the adjusting of the specimens exhibited with a view to the fact that they were to be seen by a number of non-professional persons of both sexes. Certain groups of specimens were put aside and not shown except to persons known to be physicians, while other groups were given prominent places because they interested the public, although not of great professional or scientific value.

On the other hand, the public has gradually become accustomed to consider the Army Medical Museum as one of the "sights" of Washington, to be visited by male and female, old and young, and when a stranger comes to the city and inquires what he ought to see, this museum will probably be named to him next after the National Museum. Since the collection has been moved into the new building near that devoted to the National Museum, of which it may almost be said to form a part, the number of visitors has rather increased than diminished, and it has been found desirable to consider with care some problems which this state of things has forced on the attention of the curator. That educated men and women should have some curiosity as to the structure of their own bodies, the functions of certain organs, the arrangement of parts in certain localities where they have felt pain or discomfort, or the changes which have caused death in relatives or friends, is perfectly natural and proper, and there is no objection to gratifying this curiosity to a very considerable extent. The wonder to me is, not that boys and girls, youths and maidens, men and women, like to see specimens which will teach them something on these points, but that so many of them remain ignorant of, and careless about, the wonderful mechanism of their own bodies. Now what are the specimens in a medical museum which most interest the public, and in what direction is it expedient to try to direct this interest and to do educational work by means of the exhibits? In the first place, the majority of men and women, when at leisure and trying

to amuse themselves, or to pass away time, prefer things that appeal more or less to the emotions, rather than those which appeal only to the intellectual faculties. The skeleton of a hand will be barely glanced at; but if it were known that it had been the hand of a great general, a great writer or a great criminal, it would be a specimen that almost every one who visits the museum would wish to see. Usually it is not expedient, nor even possible, to furnish the personal data which would arouse this purely emotional interest.

When people come to the Army Medical Museum and ask where General Smith's brain, or Judge Brown's heart, or the Hon. Mr. Jones's larynx, or Guiteau's skeleton is, and are informed by the attendant that he does not know where it is, and is not even certain that it is in the collection, there are some expressions of disappointment, it is true; and sometimes the curator is appealed to as a last resource; but a few words of explanation as to what the main purpose of the museum is, and the suggestion that one would not like to have his or her father's skull displayed and labelled with his name, no matter how great or how infamous he may have been, is usually quite sufficient to satisfy the seeker.

This addition of interest to a specimen by calling attention to certain sentimental or historical associations connected with it, is not only proper but desirable, for all specimens not derived from the human body; but for these last, the rule should be to wait a hundred years before publicly labelling them with the names of the persons from whom they are derived.

For scientific and professional purposes we, of course, want a history of the specimen, which will, as far as possible, give the data connected with its peculiarities, and among these may be race, occupation, an even name, though the emotional element does not enter into it at all. If, for example, we had before us a specimen of cancer of the stomach, it might be of great interest, taken in connection with the symptoms, or in regard to the question as to whether pylorectomy or gastro-duodenostomy would have been justifiable; but from a scientific point of view it would add little to the value of the specimen to know that it was from the body of Napoleon and not from an unknown soldier.

To return to our question as to what interests the public. Of specimens illustracting the anatomy and physiology of man no doubt the most interesting to non-medical persons are those connected with reproduction. In the hall of the Army Medical Museum, which is open to the public, we do not place specimens illustrating specially the anatomy of the genital organs; but we do exhibit a series illustrating embryology, and especially the development and growth of the human embryo, and there is no case in the museum which the average visitor will linger long. The specimens are clearly labelled; a lady may go there along, and, unnoticed, may at her leisure learn something about her own peculiar function, and the provisions for the life of the new organism; and I think she will hardly find the same facilities for this self-study anywhere else in the world. I do not mean by this that other museums may not have larger and more instructive collections of such specimens, but that they are not available for the information of modest, respectable non-professional women.

In what has been said thus far, it is chiefly the utilitarian point of view that has been made use of; but this is by no means the whole matter. No art, and no branch of science should form the sole end and object of a well balanced life, and there are objects in every large museum which are of great interest, though they appeal rather to the emotional than the intellectual faculties of the spectator. There are many specimens in the Army Medical Museum which I would rather see removed than to lose John Hunter's lancet, which has no scientific interest whatever. So also its collection of between three and four hundred medals and tokens relating to medical institutions or distinguished medical men, or commemorating outbreaks of pestilence or the victories of preventive medicine, is one which should

be made complete and fully displayed, though it would not be easy to demonstrate its utility to any one unless he were interested in the history of the struggles and triumphs of the medical profession.

The objects of a medical museum are to preserve, to diffuse and to increase knowledge. Its conservative function is to form a permanent record of what has been demonstrated and to fix the meaning of terms. Even in my brief experience of thirty years the terminology of anatomy, physiology, pathology, chemistry and of most of the specialties has greatly changed, and this not only by addition of new terms, but by the dropping of old ones. To get useful results from the older literature we must know the precise significance of the old words, and, in some cases, the best way to learn this is to examine the specimens prepared by those who used such terms in their descriptions. The specimens in our museum which came from the collections of Professor William Gibson and Dr. Frank Hastings Hamilton are especially valuable, because they were the basis of practical teachings, and should be examined by any one criticising these teachings.

A large proportion of the pathological specimens in this museum illustrate conditions which now rarely occur, forming a group which it is safe to predict will never be duplicated. It is not only that they were gathered during a great war, but that they illustrate the results obtained when antiseptic surgery, as now understood and practised, was unknown. Never again, I hope, will there be brought together such a collection of the effects of pyogenic microörganisms on gunshot wounds, especially of bone, as may be seen in its cases.

The museum also preserves, for future investigations, objects whose nature or relations are not understood at the time when they are received, and which occur so rarely that the means of studying them by comparison can only be obtained through such preservation.

Upon the function of a museum as a diffuser of knowledge,—as a means of education, it is needless to dwell. That it should also strive to increase knowledge is equally certain. This is to be effected by study and comparison of its materials. The results of such study and comparison of a part of the Army Medical Museum collection have appeared in the volumes of the *Medical and Surgical History of the War*. Another part will, I hope, soon be utilized in a study of its collection of human skeletons and crania which has been commenced by Dr. Matthews, of the Army. But a considerable part is as yet only in the stage of agglomeration, and our present business is to collect and preserve, leaving to the future its full ultilization.

A medical museum is really used, for purposes of study, by very few persons; but through the teaching of those few its lessons are made known to the whole profession. American physicians in investigating a subject do not, as a rule, think of inquiring as to what museums can show with regard to it, simply because they have not had convenient access to large collections and are not accustomed to make use of them. Thirty years ago we were in much the same situation in respect to medical literature; but as the libraries have grown, desire for bibliographical research has grown also, and I think that in like manner when we have secured a comprehensive National Medical Museum it will not only be made use of, but will give a powerful stimulus to the formation and progress of other more special collections elsewhere.

What shall be the relation of this central national collection to those formed in different parts of the country, either in connection with medical schools or with museums of broader scope? Certainly they should help one another, and this can be done in many ways. I do not in the least object to a generous rivalry to do the best work, to have the most instructive and the most artistic preparations. That is a good thing. But I would say to the anatomist of a school, when you have made a preparation which is noteworthy, offer to make a copy for the national collection, where it will be seen by the anatomists of all schools and of all countries. To the

pathologist of a medical school I would say, after you have secured type specimens for your own collection put aside other good specimens for the National Medical Museum, which will furnish you materials for the purpose.

On the other hand, the collections of the National Medical Museum are available for study by any proper person, and its duplicates should be used to aid other museums which may be in spectal need of them.

In common with several of the largest and most important medical museums, more especially those of the Royal College of Surgeons and of the Faculty of Medicine of Paris, the Army Medical Museum has the advantage of being closely associated with a large medical library which is in the same building, and at present under the same direction. The increased utility and attractiveness which this gives to both library and museums is very decided.

It is true that in some other institution similarly arranged there has been some grumbling as to the proportion of funds allowed to the museum and to the library respectively, the museum enthusiast claiming that the librarian would rather have one rare old pamphlet than half a dozen entirely new vertebrates, while the bibliophile is sure that the demand of the profession for access to a full supply of books and journals is much greater than that for access to specimens. I can only say, from my own experience, that one who has charge of a library only, will probably not hesitate to take museum funds, if he can get hold of them, to buy books; but that when one person is responsible for both he will endeavor to give each its fair share of the resources at his command.

If we had to choose between having a great national medical library and a great national medical museum, no doubt most of us would take the library, because it would be of more immediate use to us; but no such unpleasant alternative is forced upon us. There is no reason why we should not have both, and we must have both.

I have time for only a very condensed statement of the wants of our National Medical Museum.* In the first place it needs the intelligent interest and friendship of the medical profession of this country. To a very considerable extent it has this; were it otherwise it would not be what it is. But it needs more of it, and it can never have too much. Every medical man in this country should help a little and provide for the perpetuation of his name as that of a physician interested in the progress of the profession by sending at least one specimen to it. It is omnivorous in its demands for material, as will be seen by the circular which it has recently issued. But I will name as special wants, human embryos, especially those of a very early age, monstrosities and malformations of all kinds in man or in the lower animals; results of old injuries, such as fractures or dislocations, or of surgical operations, such as excisions, stumps, etc.; injuries and diseases of the eye, ear and nose; new growths of all kinds; diseases of the brain and spinal cord; and specimens illustrating the condition of bones, joints, brain, larynx and other organs in extreme old age.

In the second place it needs a regular supply of funds from the general government. To form and keep in proper condition such a medical museum as this should be is a more difficult and expensive matter than those not acquainted with such work would suppose, and the gifts of specimens from the profession must be supplemented by ample means for the preparation, preservation and proper display of these specimens, and also for the purchase of apparatus and tppical specimens of foreign work, in order that the Museum may be always able to show the latest state of knowledge and the best ways of doing things.

The annual appropriation for the Museum at present is $5000. This is sufficient, except that the printing of the catalogue, of which I shall speak presently, must be an extra charge; but the medical profession should see to it that the amount is not reduced in the rhyth-

* "There are few things in relation to our science of wh ch I am more sure than this, that every possible method of studying it should be by a l possible means promoted." Sir James Paget, in Lancet, January 22, 1887, p. 159.

mic spasms of partial economy with which some of our statesmen are afflicted.

The third need of the Museum is of a series of the right kind of descriptions of its specimens, given on labels and in a catalogue. Unaided by such descriptions it has for each man that which he can see in it, and no more. One man will see nothing but an old piece of bone, a shapeless mass of tissue bleached by alcohol, a case of old dingy brass instruments. Another will see in the same things a rare joint atrophy, implying curious abnormal nerve influence; a leprous nodule, whose history, if we knew it, would reach back through the lazar-houses of the middle ages to the far east, and whose bacilli may be the lineal descendants of those that vexed Naaman the Syrian; a case of microscopes illustrating the development of that instrument, from the first rough iron tube of the spectacle-maker of Nuremburg to the delicate and complicated instrument through which we now peer curiously into that world which lies within the world of unassisted vision. By our labels and catalogues we must tell men what to see; but to do this we must first see ourselves. The aphorism that a first-class museum would consist of a series of satisfactory labels with specimens attached means a good deal. Something has been done in this direction, as you will see on inspection of the cases; but I often wonder what sort of labels a man who has spent years in investigating the normal and abnormal structure and relations of one organ would write for our specimen of that organ. Such help as this we need; kindly, truthful criticism, the pointing out of errors and of new points of view for this mass of material.

We also need a series of printed catalogues. One of these should be in the form of compact handbooks relating to particular sections of the collection, and intended partly for the use of visitors while in the museum and partly as a ready means of letting distant friends know what material it most needs in different departments. It should also print a complete illustrated catalogue of the whole collection for the use of the investigators and teachers of the profession. Congress has been requested to grant authority for the printing of such a catalogue by the Government Printer. The material for it is nearly ready, and it would make three volumes each the size of one of the volumes of *The Medical and Surgical History of the War of the Rebellion.**

The subject of museum organization and management is one of those with regard to which it has been said that a man who is interested in it passes through three successive states of mind, viz., First, he thinks he knows almost all about it, except a few minor points of detail which he is going to look up. Second, he feels that he will never know anything about it. Third, he believes he knows a little and hopes by experience and study to know more.

The museum needs earnest and well-trained students to work up its collections so as to advance knowledge, and, at the same time, to display properly the specimens so as to make them most instructive. To all such students we shall endeavor to afford opportunities for this work. Precisely how this is to be effected is not yet clear, but here is abundance to be done, and there are quite a number of men coming on the stage who want to do such work for its own sake, because it gives them pleasure. Sooner or later we shall have half a dozen or more of specially trained men busy in the laboratories and work-rooms of the museum, each engaged on his own problems, and the whole for the common good.

The medical museum hints at matters which lie outside the scope of known physical and chemical laws. Physicians

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* Some large and valuable collections have no formal catalogues: but the results have been published in essays, monographs or text-books by those who have formed them. This is the rule as regards the collections at the various anatomical and pathological institutes and laboratories of continental schools. I have examined most of the published catalogues of medical museums partly to obtain information as to the best methods of doing such work, and partly to ascertain what might be worth indexing in them. Some of them are mere lists of specimens, of no value except for use in the museum itself. A few give accounts of many specimens, especially in pathology, which make them valuable works of reference apart from the collections themselves. To what extent such detailed descriptions should be made for publication, inculuding brief histories of cases, depends partly on the character of the specimens, party on the skill of the describer and partly on whether illustrations are to be used or not.

have not, as a rule, been very virulent theologians; their studies and their daily work tend to give them compensation of bias in this particular, and, therefore, in this age of transition in beliefs, it is not so true of them as of others, that "the old hopes have grown weak, the old fears dim, the old faiths numb." In our medical museum yonder may be found abundant illustrations of the results of physical and chemical actions and reactions upon what was once living matter, and was connected with centres of consciousness, of intellect, of emotions which imply something more than ordinary protoplasm or mere metabolism. It brings together strange company. The men who dwelt on the sides of the Andes in the old Aztec days, the men who built cities in the Gila Valley centuries before the days of Columbus, the Esquimaux, and the Indian of the plains, black and white, red and yellow, all sorts and conditions of men are represented in those bony caskets which once held their centres of life and thought; but now are reckoned only as so many crania in the Museum catalogue. The great majority of the pathological specimens imply either suffering or death, or both, of the individual from whence they came. Some of them are the results of intemperance, of lust, of folly and crime; but some are the results of unselfish sacrifice for the good of others, true flowers of blood and pain. A large group of them form one of the relics of an acute paroxysm of disease of a great nation. The old pensioner likes to keep the battered ball which crippled him, and so these relics have an interest beyond that which is purely professional. That the nation is not crippled by its loss, takes nothing from their interest, and the fact that we are physicians does not imply that we look upon them from a medical or scientific point only. Those of the combatants who survive are now better friends than ever, and the museum specimens, coming as they do from the sick and wounded of both armies, and contributed by both Union and Confederate surgeons, enforce the lesson of the unity of the profession and of its interests, as well as that of our country.

Our museum, like the library with which it is associated, includes all the specialities. No physician is so learned or skilful that he can find no instruction there, and no one is so ignorant that he cannot comprehend some of the lessons which it teachers. Taken together these institutions should contribute in no small degree to our national prestige, for which eminence in scientific work and teaching is an essential element, and if it be remembered that they are only twenty-five years old, and that during that period we have been making medical history at a tremendous rate, surely some incompletness and crudeness may well be excused or overlooked.

Speaking in behalf of the army medical department, and for the dead as well as for the living who have been charged with this work, I can truly say that we have been very proud of our charge, and that we have done our best, each according to his capacity and opportunities, to make the museum and library such as a great profession and a great nation have a right to demand.

Society Reports.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS HELD IN WASHINGTON, D. C., SEPT. 18TH, 19TH, AND 20TH, 1888.

"CEREBRAL LOCALIZATION."

The session of the congress held on the evening of Sept. 19, was the most brilliant of the series. The large hall in the Grand Army building was crowded with a distiniguished audience. The subject discussed was one of the most interesting to the medical profession, and those taking part were the leading specialists of the world, and their associates in the profession were anxious to hear them. Dr. Charles K. Mills, of Philadelphia, the professor of diseases of the mind and nervous system in the Philadelphia Polyclinic and College for Graduates in Medicine, opened the discussion, the topic being "Cerebral localization in its

practical relations." He was followed by Dr. Roswell Park, professor of surgery in the Buffalo Medical College. Both of these gentlemen read papers which were discussed by Dr. David Ferrier and Mr. Victor Horsley, of London, England, Dr. W. W. Keen, of Philadelphia, Dr. Robert F. Weir and Dr. M. A. Starr, of New York city. Diagrams were displayed on the wall, and by their aid the various speakers pointed out the brain centers. Dr. Ferrier, one of the original discoverers of brain centers, claimed that they were distinct areas, while Mr. Horsley was of the opinion that they overlapped. Dr. Mills' paper was an exhaustive one, describing the results of the latest modern discoveries. Dr. Park covered about the same ground, and his paper was regarded as a masterly exposition of the subject.

On Thursday evening, Sept. 20th, the final meeting of the congress was held in the hall of the National Museum. Dr. Billings, the president of the congress, delivered an address on "Medical Museums."* Upon the conclusion of the address a reception was held in the United States Army Medical Museum building.

ANOTHER SOCIETY ADMITTED TO MEMBERSHIP.

The executive committee of the congress admitted to membership the American Gynecological Society, which was in session in Washington. At the last annual meeting of this society the proposition to unite with the other societies in the formation of the congress was considered, but not finally acted upon. They completed at the present meeting the consideration of the matter and decided to come in, and the society has been admitted. There were two other societies in session there not members of the congress. They were the American Association of Obstetricians and Gynecologists and the American Pediatric Society. These societies were not admitted to membership in the congress in consequence of the adoption of a rule by the executive committee fixing as a condition of membership that the society applying for admission must have been in existence for more than two years, and must submit two volumes of transactions to be examined on their merits.

* See *Maryland Medical Journal*, Sept. 22 and 29, 1888.

THE AMERICAN PHYSICIANS.

The Association of American Physicians, at their last session elected officers for the ensuing year as follows: Dr. Francis Minot, of Boston, president; Dr. R. Palmer Howard, of Montreal, Canada, and Dr. S. C. Busey, of Washington, vice-presidents; Dr. I. Minis Hays, recorder; Dr. Henry Hun, of Albany, N. Y., secretary; Dr. W. W. Johnston, of Washington, treasurer. Dr. George L. Peabody was elected a member of the council. The association meets annually in Washington, and their next meeting will be held in June.

THE AMERICAN SURGICAL ASSOCIATION.

The election of officers by the American Surgical Association resulted as follows: President, D. W. Cheever, Boston; vice-presidents, T. G. Richardson, New Orleans, and J. B. Roberts, of Philadelphia; secretary, J. R. Weist, Richmond, Ind.; treasurer, P. S. Conner, Cincinnati; warder, J. Ewing Mears, Philadelphia; council, W. F. Peck, Davenport, Iowa; S. W. Gross, Philadelphia, John S. Billings, U. S. A., and L. McLane Tiffany, Baltimore; chairmain of the committee of arrangements, Dr. Billings. The association will hold its next annual meeting in Washington on the second Tuesday in May, 1889.

THE GYNECOLOGICAL SOCIETY.

The American Gynecological Society held a business meeting in Columbian College Hall and elected officers and fellows as follows: President, H. P. C. Wilson, of Baltimore; vice-presidents, Wm. T. Lusk, of New York, and Ed. W. Jenks, of Detroit; secretary, Joseph Taber Johnson, of Washington; treasurer, Matthew D. Mann, of Buffalo; other members of the council, Eli Van

de Warker, of Syracuse; Geo. J. Engelmann, of St. Louis; J. E. Jauvin, of New York, and B. B. Browne, of Baltimore. Elected as active fellows—S. C. Gordon, of Portland, Me.; John S. Coleman, of Augusta, Ga.; Henry S. Coe, of New York; T. A. Ashby, of Baltimore; A. Palmer Dudley, of New York; H. T. Boldt, of New York; E. C. Gehrung, of St. Louis. For honorary fellows—Foreign: Wm. Overend Priestly, of London; Grailey Hewitt, of London; Alexander R. Simpson, of Edinburgh; August Martin, of Berlin; Amedie Doleris, of Paris; American: Gilman Kimball, of Lowell, Mass.; E. Taylor, of New York; Alexander Dunlap, of New York; Emil Noeggerath, of New York. The place decided upon for the next meeting was Boston, and the time the third Tuesday in September, 1889. The society rescinded its action of last year and joined the congress this year.

THE AMERICAN NEUROLOGICAL ASSOCIATION

The new officers for 1888 and 1889 are: President, Dr. E. C. Seguin, of New York; vice-president, Dr. C. L. Dana, of New York; secretary and treasurer, Dr. Hammond, of New York; council, Dr. P. Zenner and Dr. J. H. Lloyd. The time for the next meeting is June, and the place New York.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

The following are the new officers for 1888 and 1889: President, Dr. James E. Graham, of Toronto, Canada; vice-president, Dr. Samuel Sherwell, of Brooklyn; secretary and treasurer, Dr. George H. Tilden, of Boston. Boston, September 17, 1889, was decided upon as the place and time for holding the next meeting.

Reviews, Books and Pamphlets.

Comparative Studies of Mammalian Blood, with special reference to the Microscopical Diagnosis of Blood-Stains in Criminal Cases. By HENRY F. FORMAD, B.M., M.D., Lecturer on Experimental Pathology and Demonstrator of Morbid Anatomy in the University of Pennsylvania. With 16 illustrations, from Photo-Micrographs and Drawings. Phila., 1888. 8vo., pp. 61.

This research was read in substance before the College of Physicians and Surgeons of Philadelphia, and is now published through the liberality of the Editors and Publishers of the *Journal of Comparative Medicine and Surgery.* It records personal observations by the author in the domain of comparative histology of mammalian blood, and contains also a brief account of what is generally known about microscopy of blood examinations.

Can human blood be distinguished with certainty from that of animals? The author's answer to this is that it can from that of all the domestic animals, except the guinea-pig.

The modus operandi of accomplishing this, well understood and practised by experts in microscopy, is by measurement of the size of the red cospuscles or of micro-photographs thereof, by means of the micrometer under high powers of the microscope, or by re-photographing the micro-photographs and then measuring the amplified photographs. The results are equally reliable whether the blood be fresh or dried, provided it has not undergone putrefaction. The corpuscles of oviparous blood are excluded from consideration by their oval and more or less convex shape and by their nucleus, those of all mammals (except the camel) being round, biconcave and devoid of nucleus. The red corpuscles of mammals (except the camel) differ only in their size. Those of the guinea-pig approach most nearly those of man, of all *domestic* animals are alone indistinguishable from them. According to the author's own measurements made in thousands of cases the mean diameters of the corpuscles in man, the guinea-pig and the dog are respectively $\frac{1}{3200}$, $\frac{1}{3400}$ and $\frac{1}{3580}$ inch. Other observers have found no appreciable difference between man and the guinea-pig. Dr. Formad's figure is the result

of examinations of ten (ordinary) guinea-pigs, ten preparations from each and measuring 100 corpuscles from each animal.

A possible error from variations in the size of corpuscles in the individual animal is met by the fact that such variations rarely amount to more than 1 to 3 per cent. while conclusions depend upon the mean of hundreds of measurements of well-shaped corpuscles. Whilst the opinion of authorities is not unanimously in accord with the comprehensive statement of Dr. Formad, it is tending under improved instruments and methods and high-power lenses, very strongly in that direction. The immense labor and the great skill required, however, seem to debar any from entering this field of research except long-trained expects.

The Modern Treatment of Diseases of the Liver, by PROF. DUJARDIN BEAUMETS. Translated from the fifth French Edition by E. P. Hurd, M. D., Newbuayport, Mass. [Physicians' Leisure Library.] 1888. Geo. S. Davis, Detroit, Mich. Pp. 180, price 25 cts.

Therapeutics; its Principles and Practice, by H. C. WOOD, M.D., LL.D. A work on Medical Agencies, Drugs and Poisons, with special reference to the relations between Physiology and Clinical Medicines.

The Seventh Edition of A Treatise on Therapeutics, rearranged, rewritten and enlarged. Philadelphia, J. B. Lippincott Company, London, 10 Henretta street. Baltimore, Cushing & Bailey. 1888. Pp. 908. $6 cloth.

A Test Book of Pharmacology, Therapentrcs and Materia Mediea, by T. LAUDER BRUNTON, M.D., D.Sc. F. R. S., adapted to the United States Pharmacopœa by Francis H. Williams, M. D., Boston, Mass. Third Edition. Philadelphia, Lea Brothers & Co. 1888. Pp. 1261.

Excessive Venery, Masturbation and Continence; the Etiology, Pathology and Treatment of the Diseases resulting from Venereal Excesses, Masturbation and Continence. By JOSEPH W. HOWE, M. D., author of "Emergencies" etc. N. Y. E. B. Treat. 1888. Pp. 299.

Manual of Chemistry. A Guide to Lectures and Laboratory-Work for Beginners in Chemistry. A Text-Book specially adapted for Students of Pharmacy and Medicine. By W. SIMON, PH.D., M.D., Professor of Chemistry and Toxicology in the College of Physicians and Surgeons; Professor of Chemistry and Analytical Chemistry in the Maryland College of Pharmacy, Baltimore, Md.

Second Edition, Thoroughly Revised and grealy enlarged, with forty-four illustrations and seven colored plates representing fifty-six Chemical Reactions. Philadelphia, Lea Brothers & Co. 1888. Pp. 479.

Partial Syllabic Lists of the Clinical Morphologies of The Blood, Sputum, Feces, Skin, Urine, Vomitus, Foods, including Potable Waters, Ice and the Air, and the Clothing (After Salisbury). By EPHRAIM CUTTER, M.D. Harvard and University of Pennsylvania, A.M. Yale, LL. D. Iowa, Hon. F.S.Sc. (London). New York. The Ariston, Broadway and 55th street. Published by the author. 1888. In cloth a dollar.

Electricity vs. Tait or the Use of Electricity in Inflammation as Found in Gynecology. By GEO. F. HULBERT, M.D., late Superintendent of Female Hospital, St. Louis, Read in abstract before the St. Louis Obstetrical and Gynecological Society, June 21, 1888. Reprint from *St. Louis Courier of Medicine*, Sept. 1888.

Rectal Insufflation of Hydrogen Gas, an Infallible Test in the Diagnosis of Visceral Injury of the Gastro-Intestinal Canal in Penetrating Wounds of the Abdomen. By N. SENN, M.D., PH.D., attending Surgeon to the Milwaukee

Hospital, professor of principles of surgery and surgical pathology in the Rush Medical College, Chicago, Ill. Read in the Section on Surgery, at the thirty-ninth annual meeting of the American Medical Association, May 9, 1888, and illustrated by three experiments on dogs. Reprinted from the *Journal of the American Medical Association*, June 23–30, 1888. Chicago. Printed at the office of the Association. 1888.

Footprints of a Profession; or Ethics in Materials and Methods. Address delivered before the Maine Dental Society, at their twenty-second annual meeting, held in Waterville, July 19 and 20, 1887. By Horatio C. Meriam, D.M.D., Harvard University Dental School. Second edition, revised and enlarged. St. Louis, Mo. The Dental Journal and Library Association, publishers, 1888,

An Experimental Contribution to Intestinal Surgery with special reference to the Treatment of Intestinal Obstruction. Read in the Surgical section of the ninth Inteanational Medical Congrers, Washington, September 5, 1887. By Nicholas Senn, M. D., Ph. D., of Milwaukee. Attending surgeon to the Milwaukee Hospital, professor of the Principles of Surgery and Surgical Pathology in Rush Medical College, Chicago, Ill. Reprinted from Annals of Surgery January —June, 1888. J. H. Chambers & Co., 914 Locust street, St. Louis.

A Study of some of the Bacteria Found in the Dejecta of Infants Afflicted with Summer Diarrhœa. By William D. Booker, M.D., of Baltimore. [Reprinted from the "Transactions of the Ninth International Medical Congress," Vol. III.]

Etiology of Fever, by L. B. Anderson, M. D., Norfolk, Va. Reprinted from *American Lancet,* August and September, 1888.

Antipyrine. By Benjamin Marshall, M.D., San Francisco, Cal. Reprint from "Pacific Medical and Surgical Journal and Western Lancet," July, 1888.

The National Formulary of Unofficient Preparations. First issue. By authority of the American Pharmacentical Association. Published by the American Pharmacentical Association. 1888.

The Reassembling of Schools and Infectious Diseases.—The time for the reassembling of our schools induces us to say a word of great importance to both masters and pupils. The introduction of infectious disease into a family is distressing and disturbing enough. But this is little compared with the hardship of its introduction into schools. Yet this is often done with most singular carelessness. A few days after a school reassembles, a boy shows malaise and develops infectious disease, with which he may infect twenty other boys, possibly some of them with fatal results. Short of this, the derangement of the school and of the work and plans of the individual boys is enormous. This is a case in which the argument for notification is very cogent, and in which carelessness is something like a crime. Every parent who is guilty of such carelessness ought to be made to realise the gravity of his fault. A few successful prosecutions for the exposure of children with infectious diseases would do good. There are some parents who are not amenable to any other kind of argument. But, in general, the evil "is wrought by want of thought." It is not the less cruel in its operation. A word in time may induce all parents to reflect on their responsibility in this matter. If their children have had any doubtful illness, let them be kept at home till all fear of conveying disease is clearly over. The profession is often pressed in this matter. It should not suffer itself to be so. When there is any doubt in any given case, the benefit of the doubt should be given, not to the single child, but to the school to which it is proposed to send it. We give this advice with a grave sense of the evil to be averted.—*Lancet.*

MARYLAND MEDICAL JOURNAL

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BALTIMORE, SEPTEMBER 29, 1888.

Editorial.

THE MEDICAL STUDENT.—As the medical schools and colleges all over the country are opening their doors to the new importation of young men who have misguidedly chosen the practice of medicine as a means of livelihood, a word, if not of warning, even of advice may not be amiss to the unfortunate student. The chosen pathway is not one of roses nor is the work without difficulties. Starting, as the students in this country usually do, with didactic lectures, clinics, demonstrations hour after hour, and day after day, a feeling of confusion and despair will fill the student's mind. It is only gradually that this chaos becomes reduced to order and the dove-tailing of lectures and clinics will be appreciated. One great difficulty in such a hurried course of two years, as unfortunately so many courses are, is the mental tension necessary to hold the attention throughout the day. This is especially appreciated by those students without a collegiate training and with perhaps little preliminary education of any sort.

A recent writer in addressing medical students (*Lancet,* Sept. 8, 1888,) gives such good advice on the subject of taking notes that his words may be well quoted here:

"In attendance at lectures, the student will do well to acquire the habit of taking notes; these are valuable not only for the assistance they give in enabling the student to follow the logical sequence by which the lecturer enforces certain propositions, or for providing a concise statement of facts in a convenient form, but they have a special value in teaching the process known as "separating the wheat from the chaff." There is mostly, and we venture to think there always should be, a certain amount of "chaff" in every lecture. It is the gilding of the pill which makes it easier to swallow, but attention must not be limited too closely to the gilding. A good joke, a quaint association of ideas, may serve to rouse flagging attention, while, perhaps, the fact which the lecturer desires to impress upon the memory will be more readily retained from being linked with some light word. Note-taking is often regarded as a waste of labor, even when it is not thought to interfere with the concentration of attention so frequently demanded; but it is distinctly an art worth cultivating, since it serves to train the student in the mental habit of rapidly and certainly separating essentials from gloss. In after-life he will have to listen to many a lengthy tale, during which an untrained mind is apt to wonder, so that the grain of fact of vital importance is in danger of being overlooked. To be of real service the notes should be truly *notes,* and not aim at being *verbatim* reports. They should receive additions or corrections (but still in the briefest note form) from subsequent reading, but over-elaboration is a woful loss of time. One of the saddest things in a student's career is the weary labour so often undertaken in transcribing notes with clerk-like precision, or with the painful earnestness of a schoolboy who expects to be commended for the appearance of his note-book. No one can expect credit at examinations for facts which are possibly neatly inscribed in a note-book, but yet are not to be found in the candidate's answers. Nothing can well be more vexing during examination than to remember the exact ap-

pearance of the page upon which an answer to the question has been buried decently, but beyond recall, and yet to find that this is mere obstructive association of ideas, since the details elude the grasp. Note-books are not text-books. It is useless to deal with them as though they were intended for exhibition or publication. They should be simply records of all that seemed best worth remembering at the time the lectures were attended. They should but form the pegs upon which to suspend the facts derived from subsequent reading and observation."

Besides actual note-taking; attendance upon demonstrations and operations, supplemented later by reference to standard text-books will add to the store of knowledge without too great a tax on the memory. Students should also remember that a certain amount of recreation helps and makes one return to books, lectures, ect., with greater zest. Courage, perserverance and attention will accomplish much.

The Relation of Albuminuria to Life Insurance.—At the recent meeting of the Association of American Physicians the subject of Albuminuria with and without the presence of casts was considered sufficiently important to take up a large part of one day's discussion. The subject of cyclic or so-called physiological albuminuria is best appreciated in connection with life insurance. In fact it is from this business point of view that so many apparently harmless troubles exclude an almost healthy man from the benefits of a life insurance and the question is often asked of what use is life insurance if only the absolutely healthy are insured and those that most need it for their heirs cannot get it? In ordinary practice, cyclic albuminuria is looked upon as a curiosity and little anxiety is felt for the future of the patient, but in life insurance circles, that same patient is excluded from all benefits, simply because there is a small risk.

Much depends on the test, too. A delicate reagent brings down albumen in one of its forms in a large proportion of cases, while the tried tests of heat and nitric acid only show it when abnormally present. If, aside from the mere fact of the presence or absence of albumen, the case be carefully studied, the figure, weight, condition of circulation, etc., a much more just view is apparent as to the condition of the candidate for insurance. Dr. James Tyson in discussing this at the recent congress in Washington thinks that even when slight albumen has been found in the urine, a candidate for insurance should not be necessarily excluded when, 1, he appears well, 2, when there are no casts present except mucous casts, 3, when there is little albumen, 4, when the specific gravity is above 1020° and no sugar present; 5, when there are no signs of hypertrophy of the left ventricle or high vascular tension; 6, when the age is under 40; 7, when there is no evidence of gout in any shape; 8, when the retinal symptoms would pass the patient and even without albumen.

In excepting these cases the applicant is given a much fairer chance; but the reliance on the specific gravity is not always safe. It must be taken for the whole amount passed in twenty-four hours. Any one who have seen cases of cyclic albuminuria go on unchanged month after month and even after a year or two must be impressed with the fact that bad prognoses are two often made and poor unfortunates are worried to an actual illness by the dread of a supposed fatal renal trouble.

Miscellany.

The Turkish Bath.—Most of those who indulge from time to time in the luxury of a Turkish bath have need to observe a discreet moderation in its use if they would reap its advantages without incurring its occasional risks. For the majority of persons it is, with this proviso, a wholesome and enjoyable aid to cleanliness. The rheumatic, the gouty, and the dyspeptic have often proved its therapeutic value, and the reason for this is not far to seek. Its superior efficiency

as a cleanser of the skin surface, and its powerful diaphoretic action, need only be mentioned in order to commend its use in such cases. The action set up is not, indeed, a purely local one. Not only is the skin excretion vigorously stimulated, but the bloodvessels, the absorbents,and the deeper tissues generally, are washed by the current of outgoing fluid thus set in motion, while at the same time the strain on the frequently overburdened kidneys is lightened, and this organ rendered proportionally freer and fitter for the discharge of its duties. We must not allow ourselves, however, to view the matter in its most favourable aspect alone. Serious mishaps do occasionally occur in the Turkish bath, and of this fact the recent sudden death of a man in one of the northern counties affords a suggestive illustration. The deceased had been a heavy drinker, and suffered from fatty degeneration of the heart. He had been advised by a medical man that he should not enter the bath, but in spite of the warning did so, and appears to have spent the greater part of a night in the hot and cold rooms alternately. It should be mentioned that about the same time he indulged, though not very freely, in drinking whisky. A few hours later he was found dead in the cooling room. We may remark in passing the obvious need of limitation in the time during which the establishment is allowed to remain open. In this case the immediate cause of death was clear enough te show that the danger in such cases, and it is a real one, depends on the bather's health at the time. It is generally allowed that weakness of the heart muscle from actual disease contraindicates a bath of this kind. There are also cases, however, in which almost equal caution is necessary, though the cause of weakness is mere exhaustion from temporary overstrain. This is a point to which the worried, the anxious, and the overworked would do well to give a due share of attention.—*Lancet.*

The Medical Practice Act.—At a Meeting of the State Board of Health, held on the 26th day of September, 1888, the following Preamble and Resolutions were passed:

Whereas, The following is a letter from the Chief Clerk of the Comptroller Office to the President of the State Board of Health, which will explain itself:

"*Dr. Jackson Piper:*

"*Dear Sir.*—In reply to your favor of the 12th September instant, the Comptroller directs me to say that the appropriation made in the Act of 1880, Chapter 138, cannot be used for the purpose of carrying into operation the Act of 1888, Chapter 429, of which you speak. Respectfully, etc.,

B. N. Wright,

"Chief Clerk to Comptroller."

And Whereas, Attorney General Whyte having decided that "The failures of the Legislature in furnishing an appropriation for the necessary books, certificates, etc., cannot be remedied by the Board, but if the fees received are not large enough to pay these expenses, *the law cannot be executed until the Legislature provides the proper material.*" Therefore,

Resolved, That the State Board of Health is in entire sympathy with the purposes of the Act of the General Assembly passed at January Session, 1888, entitled "An Act to Promote the Public Health and Regulate the Practice of Medicine in the State of Maryland," and would gladly execute the same if it were possible to do do; but the Legislature having failed to furnish any appropriation whatsoever for the necessary expenses, and the fees provided for in the Act not being available until "the necessary books, certificates, etc." have been provided by the State Board of Health, it is deemed impracticable, and indeed impossible, for the said Board to execute the law "until the Legislature provides proper material."

By Order of the State Board of Health,

C. W. Chancellor, M.D.,

Secretary and Executive Officer.

Treatment of Typhoid Fever.—In compliance with the request of the Sydney Bord of Health, Dr. W. Peirce, medical superintendent of the Coast Hospital, has reported upon the treatment of cases of typhoid fever, of which the rate of mortality during the first five

months of the present year has been unusually low. Dr. Peirce, in his memorandum, states that, in cases received within the first ten days of the disease, calomel (three to five grains) is administered; and after that acetanilide, in five grain doses, whenever the temperature exceeds a certain point (101° to 103°), up to six or eight times in the twenty-four hours. The effect of this is to cause a fall of temperature in about forty minutes, attaining its minimum in from two to four hours, with concomitant fall in the pulse and respiration rates, with decrease of arterial tension and profuse sweating. The tendency to delirium is diminished, and there is "a remarkable feeling of ease and repose, which appears partly to depend on the production of a certain amount of peripheral anæsthesia." When the effect of the drug passes off, the temperature often rises with great rapidity. He considers this treatment to have many advantages over cold bathing. He has given the drug continuously for several weeks, and has not found it contra-indicated, even when there were cardiac complications. It renders the course of the fever milder, but it may not lessen the duration of the disease. In all cases where it is freely given there is liability to occasional cyanosis of extremities and face, with irregular pulse. Alcohol was given very sparingly, and generally only in cases of failing heart; and Dr. Peirce thinks that the prolonged use of alcohol is very injurious. He also describes the measures employed to combat the various complications. At the meeting at which the report was read the Board of Health passed the following resolution: "That the Board of Health desire to record their appreciation of Dr. William Peirce's very able report on the subject of typhoid fever, and the reasons which have led to the small mortality in the Coast Hospital, of which institution he is the medical superintendent, during the first five months of the year 1888."—*Lancet.*

The Treatment of Hæmorrhages by Revulsion Over the Hepatic Region.—M. Petit (Bull. gén. de Therap., July 30, '88.) has made extended observations on this method of treating hæmorrhages. His cases are confined principally to hæmorrhoids, epistaxis, hæmoptyses, and in these he used either a douche or a blister over the liver with success. It is not easy to say how these applications acted, whether by diminishing the size of the liver or not. His conclusions are that certain kinds of spontaneous hæmorrhages, medical or surgical, occur in subjects affected with a chronic liver trouble, a large number of facts having shown that there exists a close relation between spontaneous hæmorrhages and chronic affection of the liver, it seems logical to treat such hæmorrhages by a revultsion over the hepatic region. This treatment has caused a definite arrest of the flow of blood in a large number of cases. When a patient with spontaneous hæmorrhage is seen, the proper treatment is to examine into the condition of the liver and if it does not appear normal, put a blister over it.

Sweating in Infectious Diseases.—In a paper read before the R. Accademia Medica di Genova on May 28th, Professor G. B. Queirolo expressed the belief that the ancient traditional treatment of acute fevers by diaphoresis was too much neglected at the present day. He was convinced that there was a considerable amount of truth in the old notion that the "peccant matter"—or "morbid virus," to give it its modern name—is, to a certain extent, eliminated in the sweat. He had been led to this conclusion by the results of some experiments on rabbits, which he inoculated with the sweat of patients suffering from various fevers (small-pox, ague, articular rheumatism, pneumonia, etc.). These experiments were controlled by others in which sweat from persons in perfect health was used in a similar manner. The sweat was always collected and kept under the same conditions, the reaction being neutral, and the specific gravity about 1,006. All the rabbits into which sufficient doses of "pyrexial" secretion were injected died in from two to forty-eight hours; while the others, into which an equal or larger amount of

healthy sweat was injected, were not affected in any way whatever. The former died without showing any rise of temperature, and on *post-mortem* examination not one of the known signs of septic infection was discovered; the spleen was not enlarged, and only in a few cases was there some scanty serous or sero-sanguinolent effusion in the peritoneal cavity. Professor Queirolo thinks that these experiments prove that the sweat of persons suffering from infectious diseases contains toxic matters, as to the nature of which, however, he is not prepared to express any definite opinion. He urges that in such cases diaphoresis should be encouraged by every means in our power, particularly by making the patients drink large quantities of liquid, whereby the poisonous matters produced by the infecting virus may be, as it were, washed out of the organism. Dr. Queirolo is continuing his researches on this subject, and promises to publish his results at an early date.—*The British Med. Journal.*

The French Doctor of 1650.—I apprehend that the doctor of medicine in the middle of the seventeenth century in France, unless he has been caricatured out of all recognition by Molière, must have been altogether the most stupid, pompous, brainless formalist that ever in any age of the world practised the art under a learned title. Scholastic lore, such as it was (and that, too, of a very poor and superficial kind) had eaten out the heart of him, and at the same time puffed him up into the *simulacrum* of a personage, who rode upon his mule with gorgeous trappings, and wore a robe, and surrounded himself with a wall of *etiquette*, which only served to conceal gross ignorance. The best of them, such as Guy Patin, Dean of the Faculty, who has left us a transcript of himself in almost innumerable familiar letters, were men of much conventional learning and good intentions, but wholly without insight, and tied up in chains of routine. The worst of them were, probably, what Molière describes, no doubt with pardonable and amusing exaggeration. Molière, indeed, could hardly fail to find out and make ridiculous for all time the weak points of such a medical *régime* as then existed. Everyone must remember M. Tomès *L'Amour Médecin*, who, when told as a matter of fact that his patient was dead and buried, replied that *that* was impossible, because Hippocrates had said that this particular kind of case was not fatal except on the fourteenth or the twenty-first day. Crushing rejoinder —"Hippocrate dira ce qu'il lui plaira; mais le cocher est mort!"—the force of learned folly could go no further. The satirical portrait of Thomas Diafoirus, which I have had occassion to quote before now, and the magnificent installation of Argan in the *Malade Imaginaire*, remain for us and our remotest successors, to show how the art of healing may degenerate under the influence of scholasticism, and how base a creature it was at least *possible* to represent a "physician" as having become in the days of Louis XIV., in the midst of a most brilliant outburst of literature and art, at the very time when Harvey's great discovery was slowly making its way against prejudices derived from the darkest of the Middle Ages, and the still overpowering authority of Aristotle and of Galen.—*Gairdner.*

WANTED.—Young physicians or medical students to canvass the cities of Baltimore and Washington and the states Maryland, Virginia, West Virginia, and North Carolina, for a medical publication. To good man a rare chance of making money offered. Apply at this office, 209 *Park Avenue.*

Medical Items.

Professor C. E. Riggs of the St. Paul Medical College is at present in this city.

Dr. L. McLane Tiffany was elected one of Council of the American Surgical Association for 1888-89.

Dr. H. P. C. Wilson was elected president of the American Gynecological Society for 1888-89.

Dr. B. B. Browne was elected one of the Council of the American Gynecological Society for 1888-89.

Dr. T. A. Ashby was elected an active fellow of the American Gynecological Society at its last meeting held at Washington,

Dr. Frank Donaldson has resigned his position as Clinical Professor of Diseases of the Throat and Chest, at the University of Maryland. The vacancy has not yet been filled.

A Russian doctor has established a dairy farm near St. Petersburg for the express purpose of supplying sterilised milk, free from microbes, for the use of hand fed infants.

A surgeon's greatness is now estimated no longer by his manual dexterity, but by the percentage of recoveries in the cases upon which he operates.

Viburnum Prunifolium Schatz extols in those cases of pregnancy in which on account of previous abortions or premature labors the same accidents are again to be feared.

The Mother of Henry VII. of England (Margaret Beaufort, Countess of Richmond) was but a little past thirteen years of age when she gave birth to the future king.—*Med. Rec.*

Professor George H. Rohé will deliver the introductory lecture before the College of Physicians and Surgeons on Monday, October 1st, at 8 P. M., at the College.

Owing to the continued illness of Professor John S. Lynch, Professor A. B. Arnold, will in addition to his own, deliver the lecture on Materia Medica and Therapeutics at the College of Physicians and Surgeons.

Dr. Frank Donaldson, Jr., has given up his practice in this city, and has sailed for Europe to superintend, as Medical Inspector, the continental business of the Equitable Life Insurance Company of New York.

The Accademia medico-fisica fiorentina has offered a prize of five hundred francs ($100) for the best work upon the surgery of the brain, spinal cord, and contagious structures. The essay must be written in Italian, French or Latin.—*Med. News.*

From the medical journals of other cities, we learn that an endowment of $200,000.00 is to be raised with which to establish a clinical department to the Michigan University. We shall be glad to see evidence that such a scheme is being perfected.—*Amer. Lancet.*

Among the improvements made at the University of Maryland School of Medicine this season is the adnition of a large number of theatre chairs in the Chemical and Anatomical Halls in place of the old uncomfortable benches. This change was rendered necessary from the large increase in the number of medical students this year.

Nitroglycerin in Heart Failure.—Dr. M. H. Firnell, of Philadelphia, after reporting three cases of syncope in which hypodermic injections of two drops of a 1-per-cent solution were used, remarks (*Med. and surg. Reporter*): "One who has seen cases of heart failure treated in the usual way can have no conception of the brilliant results which may be obtained by the hypodermic use of nitroglycerin."—*Amer. Druggist.*

The Reform of Circumcision.—The Israelites of Paris recently appointed a commisison of surgeons, under the presidency of Zadoc Kahn, the Grand Rabbi, to consider what modifications might advantageously be introduced in the ritual of circumcision. They have published rules looking to more thorough cleanliness of the operator, of his instruments, and of the infant, and have decided to do away with the sucking of the wound after the operation.—*Record.*

A convenient method of Prescribing Tincture of Iron in a mixture that is *not inky*, is the following:—

℞.	Tinct. ferri chloridi,		f℥ij
	Potass. citrat.,		f℥ij
	Tinct. gentian. comp.,		
	Elixir. simplicis,	aa	f℥iij. M.

Sig.—Two teaspoonfuls in water after meals. —*Col. and Clin. Record.*

For Eczema of the Anus and Genitals.—Lustgarten recommends the following ointment in this painful affection:

℞.—Oleate of cocaine	.	½ to 1 part.
Olive oil	. . .	2 parts.
Lanolin	. . .	10 parts.—M.

Apply this ointment twice a day to the affected part.—*Gazette de Gynecologie*, July 15, 1888.—*News.*

The following formula is a pleasant and convenient form of administering antifebrin, viz.:

℞.—Antifebrin,	. . .	℈ij
Alcohol,	. . . .	℥ij
Glycerine,	. . . .	℥iij
Aquæ cinnamomis,	. .	℥j
Syr. simpl.	. . . .	℥iij.

M.—Sig.—One-half teaspoonful every two to four hours, according to age and necessities.

The alcohol prevents the disposition to depression on the part of the drug.—*I. N. Love, M.D., in Weekly Medical Review.*

At the Congress of American Physicians and Surgeons, there was a good representation from Europe present, Dr. Arthur Durham, Dr. William Ord, Sir William MacCormac, Dr. Priestley, Dr. Pye-Smith, Sir Spencer Wells, Dr. Grailey Hewitt, Mr. Victor Horsley, F.R.S., and Mr. F. S. Eve, of London; Prof. Thomas Annandale, of Edinburgh; Mr. Reginald Harrison, of Liverpool; Mr. Charles Wiliams, of Norwich, England; Dr. Cordez, of Geneva and Dr. Esmarch, of Schleswig-Holstein. Many of these gentlemen visited Baltimore and inspected the Johns Hopkin's Hospital and were afterwards entertained by Dr. Alan P. Smith; Sir Spencer Wells and daughters and Dr. Priestley and wife were entertained by Dr. Robert T. Wilson, Dr. William Ord and daughters by Dr. H. P. C. Wilson, and Mr. Victor Horsley, F.R.S., by Dr. L. McL. Tiffany

as a cleanser of the skin surface, and its powerful diaphoretic action, need only be mentioned in order to commend its use in such cases. The action set up is not, indeed, a purely local one. Not only is the skin excretion vigorously stimulated, but the bloodvessels, the absorbents,and the deeper tissues generally, are washed by the current of outgoing fluid thus set in motion, while at the same time the strain on the frequently overburdened kidneys is lightened, and this organ rendered proportionally freer and fitter for the discharge of its duties. We must not allow ourselves, however, to view the matter in its most favourable aspect alone. Serious mishaps do occasionally occur in the Turkish bath, and of this fact the recent sudden death of a man in one of the northern counties affords a suggestive illustration. The deceased had been a heavy drinker, and suffered from fatty degeneration of the heart. He had been advised by a medical man that he should not enter the bath, but in spite of the warning did so, and appears to have spent the greater part of a night in the hot and cold rooms alternately. It should be mentioned that about the same time he indulged, though not very freely, in drinking whisky. A few hours later he was found dead in the cooling room. We may remark in passing the obvious need of limitation in the time during which the establishment is allowed to remain open. In this case the immediate cause of death was clear enough te show that the danger in such cases, and it is a real one, depends on the bather's health at the time. It is generally allowed that weakness of the heart muscle from actual disease contraindicates a bath of this kind. There are also cases, however, in which almost equal caution is necessary, though the cause of weakness is mere exhaustion from temporary overstrain. This is a point to which the worried, the anxious, and the overworked would do well to give a due share of attention.—*Lancet.*

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Whereas, The following is a letter from the Chief Clerk of the Comptroller Office to the President of the State Board of Health, which will explain itself:

"*Dr. Jackson Piper:*

"*Dear Sir.*—In reply to your favor of the 12th September instant, the Comptroller directs me to say that the appropriation made in the Act of 1880, Chapter 138, cannot be used for the purpose of carrying into operation the Act of 1888, Chapter 429, of which you speak. Respectfully, etc.,

B. N. WRIGHT,

"Chief Clerk to Comptroller."

And Whereas, Attorney General Whyte having decided that "The failures of the Legislature in furnishing an appropriation for the necessary books, certificates, etc., cannot be remedied by the Board, but if the fees received are not large enough to pay these expenses, *the law cannot be executed until the Legislature provides the proper material.*" Therefore,

Resolved, That the State Board of Health is in entire sympathy with the purposes of the Act of the General Assembly passed at January Session, 1888, entitled "An Act to Promote the Public Health and Regulate the Practice of Medicine in the State of Maryland," and would gladly execute the same if it were possible to do do; but the Legislature having failed to furnish any appropriation whatsoever for the necessary expenses, and the fees provided for in the Act not being available until "the necessary books, certificates, etc." have been provided by the State Board of Health, it is deemed impracticable, and indeed impossible, for the said Board to execute the law "until the Legislature provides proper material."

By Order of the State Board of Health,

C. W. CHANCELLOR, M.D.,

Secretary and Executive Officer.

TREATMENT OF TYPHOID FEVER.—In compliance with the request of the Sydney Bord of Health, Dr. W. Peirce, medical superintendent of the Coast Hospital, has reported upon the treatment of cases of typhoid fever, of which the rate of mortality during the first five

months of the present year has been unusually low. Dr. Peirce, in his memorandum, states that, in cases received within the first ten days of the disease, calomel (three to five grains) is administered; and after that acetanilide, in five grain doses, whenever the temperature exceeds a certain point (101° to 103°), up to six or eight times in the twenty-four hours. The effect of this is to cause a fall of temperature in about forty minutes, attaining its minimum in from two to four hours, with concomitant fall in the pulse and respiration rates, with decrease of arterial tension and profuse sweating. The tendency to delirium is diminished, and there is "a remarkable feeling of ease and repose, which appears partly to depend on the production of a certain amount of peripheral anæsthesia." When the effect of the drug passes off, the temperature often rises with great rapidity. He considers this treatment to have many advantages over cold bathing. He has given the drug continuously for several weeks, and has not found it contra-indicated, even when there were cardiac complications. It renders the course of the fever milder, but it may not lessen the duration of the disease. In all cases where it is freely given there is liability to occasional cyanosis of extremities and face, with irregular pulse. Alcohol was given very sparingly, and generally only in cases of failing heart; and Dr. Peirce thinks that the prolonged use of alcohol is very injurious. He also describes the measures employed to combat the various complications. At the meeting at which the report was read the Board of Health passed the following resolution: "That the Board of Health desire to record their appreciation of Dr. William Peirce's very able report on the subject of typhoid fever, and the reasons which have led to the small mortality in the Coast Hospital, of which institution he is the medical superintendent, during the first five months of the year 1888."—*Lancet.*

The Treatment of Hæmorrhages by Revulsion Over the Hepatic Region.—M. Petit (Bull. gén. de Therap., July 30, '88.) has made extended observations on this method of treating hæmorrhages. His cases are confined principally to hæmorrhoids, epistaxis, hæmoptyses, and in these he used either a douche or a blister over the liver with success. It is not easy to say how these applications acted, whether by diminishing the size of the liver or not. His conclusions are that certain kinds of spontaneous hæmorrhages, medical or surgical, occur in subjects affected with a chronic liver trouble, a large number of facts having shown that there exists a close relation between spontaneous hæmorrhages and chronic affection of the liver, it seems logical to treat such hæmorrhages by a revultsion over the hepatic region. This treatment has caused a definite arrest of the flow of blood in a large number of cases. When a patient with spontaneous hæmorrhage is seen, the proper treatment is to examine into the condition of the liver and if it does not appear normal, put a blister over it.

Sweating in Infectious Diseases.—In a paper read before the R. Accademia Medica di Genova on May 28th, Professor G. B. Queirolo expressed the belief that the ancient traditional treatment of acute fevers by diaphoresis was too much neglected at the present day. He was convinced that there was a considerable amount of truth in the old notion that the "peccant matter"—or "morbid virus," to give it its modern name—is, to a certain extent, eliminated in the sweat. He had been led to this conclusion by the results of some experiments on rabbits, which he inoculated with the sweat of patients suffering from various fevers (small-pox, ague, articular rheumatism, pneumonia, etc.). These experiments were controlled by others in which sweat from persons in perfect health was used in a similar manner. The sweat was always collected and kept under the same conditions, the reaction being neutral, and the specific gravity about 1,006. All the rabbits into which sufficient doses of "pyrexial" secretion were injected died in from two to forty-eight hours; while the others, into which an equal or larger amount of

healthy sweat was injected, were not affected in any way whatever. The former died without showing any rise of temperature, and on *post-mortem* examination not one of the known signs of septic infection was discovered; the spleen was not enlarged, and only in a few cases was there some scanty serous or sero-sanguinolent effusion in the peritoneal cavity. Professor Queirolo thinks that these experiments prove that the sweat of persons suffering from infectious diseases contains toxic matters, as to the nature of which, however, he is not prepared to express any definite opinion. He urges that in such cases diaphoresis should be encouraged by every means in our power, particularly by making the patients drink large quantities of liquid, whereby the poisonous matters produced by the infecting virus may be, as it were, washed out of the organism. Dr. Queirolo is continuing his researches on this snbject, and promises to publish his results at an early date.—*The British Med. Journal.*

The French Doctor of 1650.—I apprehend that the doctor of medicine in the middle of the seventeenth century in France, unless he has been caricatured out of all recognition by Molière, must have been altogether the most stupid, pompous, brainless formalist that ever in any age of the world practised the art under a learned title. Scholastic lore, such as it was (and that, too, of a very poor and superficial kind) had eaten out the heart of him, and at the same time puffed him up into the *simulacrum* of a personage, who rode upon his mule with gorgeous trappings, and wore a robe, and surrounded himself with a wall of *etiquette*, which only served to conceal gross ignorance. The best of them, such as Guy Patin, Dean of the Faculty, who has left us a transcript of himself in almost innumerable familiar letters, were men of much conventional learning and good intentions, but wholly without insight, and tied up in chains of routine. The worst of them were, probably, what Molière describes, no doubt with pardonable and amusing exaggeration. Molière, indeed, could hardly fail to find out and make ridiculous for all time the weak points of such a medical *régime* as then existed. Everyone must remember M. Tomès *L'Amour Médecin*, who, when told as a matter of fact that his patient was dead and buried, replied that *that* was impossible, because Hippocrates had said that this particular kind of case was not fatal except on the fourteenth or the twenty-first day. Crushing rejoinder —"Hippocrate dira ce qu'il lui plaira; mais le cocher est mort!"—the force of learned folly could go no further. The satirical portrait of Thomas Diafoirus, which I have had occassion to quote before now, and the magnificent installation of Argan in the *Malade Imaginaire*, remain for us and our remotest successors, to show how the art of healing may degenerate under the influence of scholasticism, and how base a creature it was at least *possible* to represent a "physician" as having become in the days of Louis XIV., in the midst of a most brilliant outburst of literature and art, at the very time when Harvey's great discovery was slowly making its way against prejudices derived from the darkest of the Middle Ages, and the still overpowering authority of Aristotle and of Galen.—*Gairdner.*

WANTED.—Young physicians or medical students to canvass the cities of Baltimore and Washington and the states Maryland, Virginia, West Virginia, and North Carolina, for a medical publication. To good man a rare chance of making money offered. Apply at this office, 209 *Park Avenue.*

Medical Items.

Professor C. E. Riggs of the St. Paul Medical College is at present in this city.

Dr. L. McLane Tiffany was elected one of Council of the American Surgical Association for 1888-89.

Dr. H. P. C. Wilson was elected president of the American Gynecological Society for 1888-89.

Dr. B. B. Browne was elected one of the Council of the American Gynecological Society for 1888-89.

Dr. T. A. Ashby was elected an active fellow of the American Gynecological Society at its last meeting held at Washington.

Dr. Frank Donaldson has resigned his position as Clinical Professor of Diseases of the Throat and Chest, at the University of Maryland. The vacancy has not yet been filled.

A Russian doctor has established a dairy farm near St. Petersburg for the express purpose of supplying sterilised milk, free from microbes, for the use of hand fed infants.

A surgeon's greatness is now estimated no longer by his manual dexterity, but by the percentage of recoveries in the cases upon which he operates.

Viburnum Prunifolium Schatz extols in those cases of pregnancy in which on account of previous abortions or premature labors the same accidents are again to be feared.

The Mother of Henry VII. of England (Margaret Beaufort, Countess of Richmond) was but a little past thirteen years of age when she gave birth to the future king.—*Med. Rec.*

Professor George H. Rohé will deliver the introductory lecture before the College of Physicians and Surgeons on Monday, October 1st, at 8 P. M., at the College.

Owing to the continued illness of Professor John S. Lynch, Professor A. B. Arnold, will in addition to his own, deliver the lecture on Materia Medica and Therapeutics at the College of Physicians and Surgeons.

Dr. Frank Donaldson, Jr., has given up his practice in this city, and has sailed for Europe to superintend, as Medical Inspector, the continental business of the Equitable Life Insurance Company of New York.

The Accademia medico-fisica fiorentina has offered a prize of five hundred francs ($100) for the best work upon the surgery of the brain, spinal cord, and contagious structures. The essay must be written in Italian, French or Latin.—*Med. News.*

From the medical journals of other cities, we learn that an endowment of $200,000.00 is to be raised with which to establish a clinical department to the Michigan University. We shall be glad to see evidence that such a scheme is being perfected.—*Amer. Lancet.*

Among the improvements made at the University of Maryland School of Medicine this season is the adnition of a large number of theatre chairs in the Chemical and Anatomical Halls in place of the old uncomfortable benches. This change was rendered necessary from the large increase in the number of medical students this year.

Nitroglycerin in Heart Failure.—Dr. M. H. Firnell, of Philadelphia, after reporting three cases of syncope in which hypodermic injections of two drops of a 1-per-cent solution were used, remarks (*Med. and surg. Reporter*): "One who has seen cases of heart failure treated in the usual way can have no conception of the brilliant results which may be obtained by the hypodermic use of nitroglycerin."—*Amer. Druggist.*

The Reform of Circumcision.—The Israelites of Paris recently appointed a commisison of surgeons, under the presidency of Zadoc Kahn, the Grand Rabbi, to consider what modifications might advantageously be introduced in the ritual of circumcision. They have published rules looking to more thorough cleanliness of the operator, of his instruments, and of the infant, and have decided to do away with the sucking of the wound after the operation.—*Record.*

A convenient method of Prescribing Tincture of Iron in a mixture that is *not inky*, is the following:—

℞. Tinct. ferri chloridi,		f℥ij
Potass. citrat.,		f℥ij
Tinct. gentian. comp.,		
Elixir. simplicis,	āā	f℥iij. M.

Sig.—Two teaspoonfuls in water after meals.—*Col. and Clin. Record.*

For Eczema of the Anus and Genitals.—Lustgarten recommends the following ointment in this painful affection:

℞.—Oleate of cocaine .	½ to 1 part.
Olive oil . . .	2 parts.
Lanolin . . .	10 parts.—M.

Apply this ointment twice a day to the affected part.—*Gazette de Gynecologie*, July 15, 1888.—*News.*

The following formula is a pleasant and convenient form of administering antifebrin, viz.:

℞.—Antifebrin, . . .	℈ij
Alcohol, ...	℥ij
Glycerine, ...	℥iij
Aquæ cinnamomis, . .	℥j
Syr. simpl.	℥iij.

M.—Sig.—One-half teaspoonful every two to four hours, according to age and necessities.

The alcohol prevents the disposition to depression on the part of the drug.—*I. N. Love, M.D., in Weekly Medical Review.*

At the Congress of American Physicians and Surgeons, there was a good representation from Europe present, Dr. Arthur Durham, Dr. William Ord, Sir William MacCormac, Dr. Priestley, Dr. Pye-Smith, Sir Spencer Wells, Dr. Grailey Hewitt, Mr. Victor Horsley, F.R.S., and Mr. F. S. Eve, of London; Prof. Thomas Annandale, of Edinburgh; Mr. Reginald Harrison, of Liverpool; Mr. Charles Wiliams, of Norwich, England; Dr. Cordez, of Geneva and Dr. Esmarch, of Schleswig-Holstein. Many of these gentlemen visited Baltimore and inspected the Johns Hopkin's Hospital and were afterwards entertained by Dr. Alan P. Smith; Sir Spencer Wells and daughters and Dr. Priestley and wife were entertained by Dr. Robert T. Wilson, Dr. William Ord and daughters by Dr. H. P. C. Wilson, and Mr. Victor Horsley, F.R.S., by Dr. L. McL. Tiffany

Original Articles.

SYPHILIS OF THE LARYNX, TRACHEA, AND BRONCHI.*

BY J. SOLIS-COHEN, M.D., OF PHILA.

Syphilitic processes are among the most important morbid processes affecting the larynx and trachea. Not only do they injure the structural integrity of the organs directly; but, by their location in the regions occupied by the origin and course of nerve supply, they lead to denutrition of the tissues generally, and to serious motor impairments of the muscles of the larynx. So varied are the manifestations of syphilis, and so important to the welfare of the patient their timely recognition, that considerable detail is proper in their elucidation. In hardly any department of living pathology has the laryngoscope been of more signal service than in dispelling obscurities in the conception and comprehension of syphilitic disease of the larynx.

The distinctions between secondary and tertiary syphilis, as manifested in the upper air passages, are so irregular and uncertain, that many writers prefer the terms recent and tardy. In fact, however, secondary lesions are sometimes tardy and tertiary lesions sometimes precocious. Secondary lesions are sometimes present as the sole manifestation of that period. Sometimes they precede cutaneous manifestations. Most frequently they occur in subjects already affected with what are known as mucous patches in other portions of mucous membrane or with early cutaneous syphilides.

Pathology.—The earliest and far most frequent manifestations are subacute and diffusely hyperæmic conditions of portions of the mucous membrane, of varied extent and intensity; an erythema with turgescence, but without hypersecretion, occurring with from six or ten weeks after infection. The affected surface exhibits at first the usual rose-color of congestion, but, as stases, infiltrations, and hæmic transudations occur, it becomes more or less livid in patches which present mottled or flaky discolorations. Superficial erosions often ensue. Occasionally, deep-seated ulceration occurs. Sometimes paresis of the muscles of the larynx is produced. The erosions may be due simply to denutrition of epithelium from mere pressure by infiltrations; or to disintegration of a characteristic proliferative lesion known as the papule or mucous patch, by some termed broad condyloma, a product, according to Virchow, of the same histological character as the indurated chancre and the various gummous formations, namely, an infiltration of tissue with nucleated embryonic cells. These papules are characteristic, but by no means frequent syphilitic products in the larynx; and are so frequent in the trachea that their occurrence there is denied by authorities the very highest. They are multiple recurrent lesions, almost invariably associated with mucous patches on other mucous membranes; usually lasting from three to five weeks, and sometimes much longer. They are observed from within a few weeks to a few months after infection; sometimes earlier, occasionally as late as eighteen months. They are far the more frequent in tuberculous subject who have contracted syphilis.

The opinion is held by some that superficial ulceration is always due to their disintegration; and that they must have existed in many cases in which they have not been observed. Histologically they are composed of small-celled infiltrations into the corium and into dilated hypertrophied papillæ. Hence they occur in localities where papillæ exist. Consequently they cannot occur below the vocal bands. They are quite red when recent, but soon change to light gray as the epithelium thickens; they then appear as small, wrinkled, opalescent, flattish, ovoidal, elevations, varying in size from pin-heads to small peas; depressed in the centre when mature, and when recent circumscribed with a peripheric inflammatory areola. They may subside without trace. When erosion takes place, the surface becomes punctatedly red from exposure of the

* Read before the Philadelphia County Medical Society Sept. 12, 1888.

papillæ. They may undergo destructive ulceration. They may become the starting-points of small pointed vegetations, histologically identical with papillomata. These are probably non-specific in character, though due to irritation excited by specific processes. They do not undergo ulceration, and rarely undergo absorption under specific medication. When forcibly removed, they repullulate quickly. Similar vegetations sometimes project from the edges of ulcerated patches of tissue. Though usually small, sessile, and multiple, they may acquire such bulk as to interfere seriously with respiration.

The erosions which occur on the surface of the papules or upon simply erythematous mucous membrane are usually superficial, but may extend through the mucous membrane and beneath it, under bad hygienic conditions. Under slight provocative exposures to cold and wet, fluxionary œdema sometimes takes place in their vicinity, occasionally to such an extent as to be menacing to life. The epiglottis often becomes very much thickened; the vocal bands thickened and dentatedly eroded. There seems to be no tendency for secondary lesions to extend from the larynx to the trachea.

Tertiary lesions come under notice most frequently in the stage of ulceration, usually following the liquefaction of gummous nodules, gummous infiltrations, or gummata, as may be. The epiglottis is the most frequent seat; so frequent, that its lingual and lateral ulceration has been erroneously deemed pathognomonic of syphilis; but destructive lesions may occur in every portion of the larynx. The ulceration is both serpiginous and deep-seated, and while more commonly unilateral, there seems practically to be little limit to its phagedenic destructive ravages under unfavorable conditions, as it destroys and penetrates all the tissues, soft and cartilaginous. Slight provocation may produce fluxionary œdema in this stage also, which may be of the most serious character. Serious hemorrhages may occur from penetration of blood vessels; and apnœa may ensue from incarceration of fragments of necrosed cartilages and soft tissues. Ulceration may be attended with proliferative vegetations which may occlude the air-passages. Superficial ulceration may heal with moderate cicatrization which eventuallly becomes hardly noticeable. Deep and extensive ulcerations heal under peculiar whitish, lustrous, stellate, retractile cicatrices, similar to those which follow burns. Instead of cicatrization, adhesions may take place between contiguous raw surfaces, and strictures of various kinds be formed in consequence.

The gummous lesions preceding these ulcerations are of three kinds: small gummous multiple nodules or nodular syphilides; diffuse gummous infiltration; and gummata proper, usually isolated.

Small gummous nodules (nodular syphilide, Lewin) vary in size from that of small bird-shot to that of peas, and are usually grouped in well-defined determinate figures in the body of the mucous membrane, and often so contiguous as to appear confluent. Gummata proper, present as firm hemispherical nodules or tumors, from the size of peas to that of cherries or almonds, and sometimes much larger, in the connective tissue beneath the mucous membrane; usually uniform in outline, sometimes lobulated; undiscolored or reddish at the base and yellowish at the summit. Gummous infiltrations present as more or less longitudinal or more diffuse submucous thickenings corrugating the surface of the mucous membrane. All these products may undergo absorption.

When not absorbed, gummous nodules undergo purulent liquefaction. At this time they become softer, and more yellowish at the summit, the mucous membrane at the base becoming more inflamed and thickened, the whole mass looking not unlike a furuncle. The summit becomes perforated, and gives exit to thickened, yellow pus, with granular admixture of débris at first. The orifice rapidly enlarges by ulceration until it becomes fully as large in circumference as the nodule was, or larger; and readily coalesces with ulcerations from contiguous nodules. The ulceration extends in depth until it occupies the entire volume of the nodules, and then may

penetrate all the tissues beneath, even to the perichondrium and cartilage.

Tho ulceration of the nodulous syphilide, as studied in a series of cases by Lewin, is said to take place more from periphery to centre than the reverse, being shallow at first, and then gradually deepening. The ulcer is round, depressed, and sharply bordered. Its bed is covered with a secretion which, from previous fatty degeneration, or purulent metamorphosis, is either thickish, or nearly lardaceous, or composed of purulent detritus.

The more longitudinal, and the diffuser gummous infiltrations undergo liquefactive ulceration much more slowly; but the subsequent ulceration, when unchecked, extends much more rapidly, and becomes more readily serpiginous and phagedenic; so that, coalescing with similar conditions in the vicinity, large surfaces in continuity become involved in its ravages. As it extends in superficies it penetrates slowly in depth until it also involves the deeper structures close to the perichondrium, and sometimes to the cartilage. Ulceration varies in rapidity, extent, and penetration according to the succulence or resistance of the tissues contiguous. The ulceration from diffuse gummous infiltration is preceded, according to Lewin, by extensive fatty degeneration of its surface, which gives it an almost grayish-white tinge. This is soon followed by actual defects which, at first shallow, increase in depth, and gradually penetrate to the perichondrium and the cartilage. These ulcers are characterized, like those from the nodules, by sharp definite circumscription, and by their being surrounded with an inflammatory swollen zone. They appear often as though a piece of swollen tissue had been cut out. The edges are often beset with slight crenations, which give them a gnawed appearance, but are never undermined; and their bottom is covered with a yellowish-white adherent mass, composed of pus, fatty detritus, and shreds of tissue. Gummata proper sometimes remain unchanged for prolonged periods. When they undergo degenerative metamorphosis there is formed, according to Lewin, only the characteristic viscid fluid, suppuration being exceptional. Ulceration takes place, however, in some instances, and penetrates deeply into the tissues beneath as in the other two forms. Under unfavorable hygienic conditions of system, or of surroundings, the phagedenic ravages may become uncontrollable. They have been known to attack an artificial opening made to prevent suffocation by a gumma (Holden, *New York Medical Journal*, January 29, 1887).

Perichondritis and chondritis being set up after either form, the ulceration may penetrate the cartilage to the tissues external, forming a perichondrial abscess, which ruptures externally by a more or less circuitous route, whence the fragments of dead tissues are discharged.

Taken in point of frequency the cartilaginous structures seem to be vulnerable in the order following: epiglottis, posterior vocal processes, arytenoids, supra-arytenoids, cricoid, cuneiform, and thyroid. Coming to the softer parts, the vocal bands are attacked next in frequency to the epiglottis, the left band far more frequently than the right; the interior supraglottic walls of the larynx, the aryepiglottic folds, the interarytenoid fold, the posterior wall, the ventricular bands, the subglottic walls of the larynx, the exerior of the soft parts in the pyriform sinus. When the cartilages are attacked, whether primitively or consecutively, the chain of morbid phenomena is perichondritis, chondritis, calcification, caries, necrosis, and elimination of sequestra in crumbled masses and in fragments. The elimination of dead cartilages may consume months, and even years. It usually takes place by the interior route, occasionally by the exterior. In both instances abscess and fistula are formed, and elimination of large fragments by the interior route sometimes produces suffocative paroxysms, and occasionally actual suffocation.

The epiglottis, as repeatedly noted, is especially vulnerable to the syphilitic process, and every variety of lesion possible may ensue in any extent, from insignificant erosion to complete destruction, the character of the lesion depend-

ing upon that of the structure destroyed. It is this, as pointed out by Seiler, which gives such an irregular conformation to the epiglottis when its glands have been destroyed.

Exculceration of the entire mucous membrane at the edge reveals the exposed cartilaginous structure as a yellowish-white stripe embedded between two thickened masses of spongy-looking tissue. Ulceration of the cartilage often commences at the anterior surface in the form of a round ulcer with thickened excavated edges. Destructive ulceration usually progresses from the side and from the edge. When the valve is only partially destroyed, its remains may present two or more irregular fragments separated by fissures of varying depth, or a single fragment of any breadth, from a small stripe to nearly the entire bulk.

When totally destroyed the orifice of the larynx is separated from the postlingual sulcus by a more or less irregular ridge of ulcerated tissue, which, after cicatrization, presents as a pale, deformed stump. This, however, does not, as a rule, prevent glutition, and in some instances does not even interfere with it; the occlusion of the larynx being effected by the base of the tongue, on the one hand, and by close approximation of the ventricular bands and sphincter-like approximation of the aryepiglottic folds, on the other.

The other cartilages, when the subject of destructive progressive ulceration, are macerated out of their investments, as it were. The one, or circumscribing a portion of it, if it be a large one. The cartilage then perishes by necrosis, is laid bare, and becomes detached from its connections, in some instances remaining entangled in a sort of pocket scooped out of the soft tissues. The necrosed cartilage finally breaks through to the interior, and is usually discharged by expectoration. If it be situated below the glottis, paroxysms of suffocation may ensue, or even actual apnœa, as from any other foreign body. Exfoliations of the cricoid cartilage are the most frequent source of these untoward results, which, however, sometimes ensue from exfoliations of the thyroid.

The ulcerative process sometimes penetrates bloodvessels and hemorrhage follows. Such hemorrhage has been known to terminate fatally (Turck, *Op. cit.*, p. 413, illustrated).

The vocal bands frequently sustain permanent lesions varying from minute losses of substance to entire destruction. Transversal dentated erosion of the border is not uncommon, and detachment from the posterior vocal processes not infrequent. Sometimes abundant irregular papillary proliferations take place, forming mobile, projecting, pyramidal, or irregular dentritic vegetations, which project like soft, mobile stalactites into the interior, and which are large enough, in exceptional instances, to demand operative interference. Similar conditions and productions may prevail with the ventricular bands. Superficial ulcerations may heal with moderate cicatrization, which eventually becomes hardly noticeable. In deep and extensive ulcerations, when cicatrization occurs, a peculiar lustrous, whitish, stellate, contractile cicatrix is formed, similar to the syphilitic cicatrix in other mucous membranes. Instead of cicatrization, adhesions often take place between ulcerated surfaces, and thus a variety of injurious morbid conditions occur. The vocal bands may become united by a broad fibrinous band stretching between them, or by a similar obturator, formed of their thickened and distended mucous membrane. The membranous web, thus formed between the vocal bands, usually unites them for a variable distance, commencing at the commissure; the posterior border of the structure being crescentic in outline. Exceptionally the cords may become involved their entire length, with an orifice in the central portion of the web (Navratil).

This membranous union has been known to take place in six days (Rossbach: Langenbeck *Archives* vol. xiv.). In a case watched by Sommerbrodt (*Berlin. klin. Woch.*, April 1, 1878), the anterior third united in fourteen days, and the union of the bands was complete in six weeks. In other cases the vocal bands become united without any membrane intervention.

Other adhesions sometimes take place, which may seriously impair glutition, phonation, and even respiration. These comprise depression of the epiglottis to one side or the other, or to an aryepiglottic fold, and preventing proper closure of the valve or complete elevation; adhesion of the epiglottis to either lateral pharyngeal wall; adhesion of ventricular to vocal band, sometimes preventing closure of the glottis, and often producing a shrill, weak, piping voice; adhesions anteriorly of the two vocal bands or of the two ventricular bands; adhesions of the inner surfaces of the mucous membrane of the arytenoid cartilages, so as to fix the vocal bands immovably in the median position. Other results of syphilitic laryngitis are hypertrophies, diffuse and discrete, of mucous membrane, connective tissues, or muscular substance, and consequent stricture, varying in extent, locality, and interference with function; myopathic paralysis; muscular atrophy, and the development of morbid growths.

Perichondritis or chondritis, whether following ulcerative destruction of the soft tissues or preceding it, usually excites considerable fibrinous infiltration into the adjacent submucous connective tissue, producing a chronic fibrinous œdema. When extensive, this produces suffocative symptoms, and may threaten asphyxia. Sometimes the submucous infiltrations become organized and transformed into dense fibrous tissues incapable of undergoing absorption, and thus they produce deformity, occlusion of the larynx, and stricture. The strictures are often incapable of yielding to systematic dilatation, even when instituted early; and hence tracheotomy is usually necessary to provide aritificial means for respiration below the seat of obstruction. After tracheotomy, the process may progress to complete obliteration.

These strictures are of the most varying form and calibre, some of them distorting the configuration of the interior of the larynx almost out of recognition. Fortunately, most of them occur in the supraglottic region, where they are far more accessible to effective treatment.

Lesions of either soft tissues or cartilage in the neighborhood of the important crico-arytenoid articulations excite non-specific inflammation of the joint which may produce true or false ankylosis. Syphilis is probably the most frequent cause of this lesion. When the specific process invades the joint, the ligaments and perichondrium suffer, and true ankylosis, or luxation, or disarticulation, and even discharge of the arytenoid and supra-arytenoid cartilages may ensue.

In the latter stage of unrestained lesion, the cachexia is much the same as in analogous advanced stages of tuberculosis.

Myopathic paralyses of the muscles of the larynx may occur in the later periods of secondary syphilis, and at any period of tertiary syphilis. They are most frequently unilateral, the left side being affected far oftener than the right. The onset is often sudden or acute, following severe or sudden exposure to cold and dampness. The paralysis often affects the dilator muscles, and bilateral paralysis of the dilators is not infrequent. Paralyses of the arytenoid muscle and of the entire constrictor group are the most frequent varieties. These paralyses differ in their pathological orgin from other examples of paralysis in syphilis, which are due, respectively, to compression of the tract of the nerve-supply by diseased tracheo-bronchial glands or other structure, and to neural or cerebral lesions which present in the latter stages of the confirmed dyscrasia.

Tertiary lesions of the trachea are first observed so very frequently in the stage of ulceration that it had been assumed that tertiary syphilis of the trachea always produces ulceration (Vierling). Schech and others have reported instances of resorption of gummata under specific medication. The clinical tendency, however, is to ulceration. Tracheal ulcerative lesions are sometimes unassociated with lesions elsewhere in the aërial tract. Much more commonly they are found associated with similar lesions in the larynx, in the bronchi, or in both.

Pharyngeal syphilis exists in many instances (thirty out of forty-six, collated by Vierling), and pulmonary syphilis in

not a few (six out of fifty, Schech). They are often found associated with additional syphilitic lesions at a distance. In a large proportion of instances a primitive bronchus is affected, the left one the more frequently; in some, both primitive bronchi; in a few, the smaller ramifications (Vierling); and, exceptionally, even the minutest (Lancereaux). In some instances syphilitic lesion is confined to the bronchi (five cases, by Vierling). The upper portion of the trachea suffers most when the larynx is involved; the lower portion, when the disease is isolated or associated with syphilis of the bronchi. In some instances the middle portion alone suffers (Vigla and Charnal, Berger, Mackenzie, of Baltimore, Semon); exceptionally, the two extremities, with complete conservation of the middle portion (Tessier, cited by Rey.)

When not occurring in direct continuity with similar lesion in the larynx, the most frequent seat of ulceration is in the anterior surface of the lower portion of the trachea just above the bifurcation whence it extends upward, or in patches continuously sometimes as far as the cricoid cartilage; sometimes almost completely around an interior in periphery, occasionally completely around. Multiple pericoondritis is easily set up and results in abscess, denudation of cartilage, calcification, caries, and necrosis. Portions of dead cartilage are sometimes coughed up in fragments. Sometimes semi-detached portions project into the interior and interfere seriously with respiration and with expectoration. The ulceration usually begins in a number of small ulcers which extend in depth and in periphery, baring the perichondrium, and causing portions of the cartilaginous rings, or entire rings, to undergo denudation, necrosis, and exfoliation. Coalescence with similar ulcerating surfaces, or phagedenic extension sometimes produces very extensive ravages which may involve nearly the entire circumference of the trachea, and nearly, occasionally quite, its entire length. Flaps of detached membrane sometimes fall over, producing valvular impediments to inspiration, or to expiration, according to the position of the attachments. The cicatrization of annular ulcerations produces stricture often so low down as to be beyond relief even from tracheotomy, the parts not being well adapted to respond to artificial dilatation. The strictures are irregularly ovoidal in shape, sometimes funnel-shaped, and of varying thickness from a few lines to that of several rings.

These cicatrices may reduce the calibre of the trachea so considerably as to prevent respiration. Occlusion to the calibre of a crowquill is not uncommon, and still greater occlusion has been noted in some instances. Annular stricture at the bifurcation may become so great as barely to admit the passage of a delicate probe. (Obtulowicz: *Cent. f. Chir.* 1879, No. 7.)

Irregular annular dilatation of the trachea is often produced by the pressure of the air current above the stricture and sometimes below it. Even dilatation of the bronchi has been noticed.

Projecting ridges of cicatrical tissue below the point of stricture are sometimes so located as to occlude the inferior orifice of a tracheal canula more or less, a point not sufficiently recognized, for it might be practicable in some instances to push a canula into a position which would allow its inferior extremity to pass the obstruction.

Stricture of the bronchi is rare. It affects the left bronchus more frequently (Verneiuel *et al.*); sometimes the right one (Wilks, *et. al*); occasionally both (Virchow, *et. al.*). The connective tissue around the strictured portions usually undergoes permanent sclerotic proliferation. Sometimes there is great peritracheal sclerosis, sometimes none. The peritracheal glands may undergo great enlargement. All these conditions superadded to the internal stricture, may greatly increase stenosis.

Ulceration sometimes penetrates through the trachea producing abscess opening into the œsophagus or the mediastinum, the aorta (Rokitansky: *Path. An.*, Bd., 111, p. 22; Wilks: *Trans. Path. Soc.*, London, 1865, p. 52), the pulmonary artery (Kelly: Id., 1872, p. 45), or the vena cava (Turner: Id., xxxvii. p. 117). In at least two instances

of ulceration of the left bronchus the left branch of the pulmonary artery has been found perforated. (Vierling).

Inflammation around the trachea or bronchi sometimes produces adhesions to the œsophagus or to other tissues, which depresses the trachea and larynx and impairs their upward movements in glutition. Sometimes it produces peritracheal or tracheo-bronchial abscess. Abscess of a bronchus, sometimes deeply seated, has occurred after tracheotomy, apparently as a result of too assiduous swabbing of the canula.

The lesions of hereditary syphilis are almost identical with those of the gummous infiltrations of tertiary syphilis. They sometimes appear very early. Ulcerations have been noticed in infants at two months of age (Parrot: *Prog. Méd.*, 1878, p. 663). Stricture from perichondritis has been noticed at the same age (Fränkel: *Wien. med. Woch.*, 1868, No. 18; Parrot: loc. cit.).

Symptomatology. — The laryngeal symptoms of secondary syphilis are not characteristic. They are chiefly comprised in dissonant alterations of the voice, either hoarseness, dysphonia, and in some cases occasional or temporary aphonia. The hoarseness is supposed to have some peculiarity which has been termed *raucedo syphilitica*, but this is not the case. In some instances it is simply due to the catarrhal laryngitis, in others to paresis of one or more of the constrictor muscles, or possibly to paralysis of the tensors. Respiration is not affected except in those instances in which œdema occurs in such a position as to occlude the passage for air, when it will be announced by dyspnœa and stridulous respiration, the characteristic symptoms of that condition. Titillation and cough are not as frequent as in inflammations of other origin. In many instances there is no tickling and no cough, no pain and no dysphagia.

Dysphagia is not present unless there be œdema of the parts utilized or pressed upon in glutition.

In tertiary syphilis of the larynx the symptoms are usually those of impairment of phonation, followed in severe cases by dyspnœa and stridor also, chiefly inspiratory. The stridor is worse at night from inaction of the auxiliary muscles of respiration. Should the mechanical impediment to respiration increase, inspiratory depression of the soft parts below the sternum takes place. If relief is not obtained, artificially or otherwise, asphyxia supervenes from imperfect aëration of the blood. Suffocation may occur suddenly from impaction of detached cartilage; but is more frequently slow enough in its approaches to allow time for tracheotomy.

Titillation and cough are more frequent in the earlier stages than in secondary syphilis; but they diminish after ulceration has taken place, except in so far as they are produced from time to time by morbid products detained upon diseased and adjuvant surfaces. Pain is infrequent before the period of ulceration; after that it may be severe, and radiate into the ears as in other ulcerative diseases. In the early stage there is no expectoration. The earliest expectoration is of collatteral catarrhal products only. As ulceration progresses it becomes muco-purulent, and then purulent and sanguineo-purulent, and mixed with detritus according to the stage and location of the lesion.

If gangrene takes place the odor becomes fetid, and the expectortion contains fragments of dead soft and cartilaginous tissues, as may be.

Dysphagia ensues when the disease is in a locality to interfere with glutition, and odynphagia when ulcerations have occurred in the same localties.

In tertiary syphilis of the trachea the symptoms affect mainly the function of respiration, the voice often remaining normal even when breathing is seriously embarrassed.

Pain along the course of the trachea, if constant, is indicative of lesion at that particular point. Cases may run their entire course without any special symptom, even in the presence of stricture of the trachea, and of the bronchi, and of extensive disorganization as revealed at the post-mortem examination.

In hereditary syphilis, the symptoms are sometimes congenital and may remain practically continuous for years.

Respiration and phonation are both affected. The cry of the infant sometimes possesses a shrill metallic resonance which has been compared to that of a tin trumpet. Cough is more frequent in the child than in the adult. Glutition is often difficult and sometimes painful. Expectoration occurs in the suppurative stages when the child is old enough to expel the products, which by infants are swallowed or retained in the air-passages. Laryngismus is a a symptom of frequent occurrence in young children.

(*To be continued.*)

REPORT OF A CASE OF POISONING BY "METHYLATED SPIRIT."

H. C. KNIPP, M.D.,

Chief of Clinic Dermatological Department University of Maryland.

About noon on August 6, 1888, I was called in to see Mr. B—— and found him in the following condition. His eyes were protruding, the lids open and pupils widely dilated. There was clonic contraction of the flexor muscles of the upper and lower extremities and also of the back and posterior portion of the neck, thus producing a mild state of opisthotonos. The respiration was labored and slow, pulse weak and infrequent. The body was covered by a profuse perspiration and was cold to the touch. There was total lost of consciousness. He had been in this condition only about 10 or 15 minutes.

Patient was a well built, fleshy man about 28 years old. Occupation, artistic painting. Frequently he would go on sprees lasting one or two weeks, sometimes more. About a week before he went on a spree and was drunk all the time. Sunday being in his room and not being permitted to go out he commenced to take "wood alcohol" or methylated spirit, which is composed of 90 per cent. pure alcohol and 10 per cent. methyl alcohol. This spirit is used in the arts and is imported free of duty. Before Monday noon he had taken fully one pint.

To stimulate his heart he was given inhalations of either, this had the effect of quickening the pulse and making it stronger and causing him to breathe easier, it also lessened the cyanosis, but unfortunately this did not last long. He was given an injection into the rectum of 30 grains of chloral hydrate to relieve the convulsions but without avail.

Before I arrived they had tried to arouse the patient by cold applied to the head, calling him by name, etc.

His pulse and respiration continued to become slower and weaker until the pulse could not be felt, but by auscultation I could hear the heart beat at each act of respiration. About fifteen minutes before death, the conjunctiva became dry and very much congested.

Those who were standing by and knew the patient said his face was swollen. The opisthotonos and conlvusions were not relieved until after the respirations had ceased. His respirations continued one or two minutes after the heart stopped beating.

Society Reports.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING HELD SEPT. 6TH, 1888.

J. C. Da Costa, M.D., in the chair.

Dr. Wm. Loodell read a paper entitled:

"A YEAR'S WORK IN OÖPHOECTOMY."

During the year 1887 he had had nineteen cases with one death; but including the cases he had since had, there was only one fatal result in twenty-nine cases. The cause of death in this fatal case was uræmic coma from suppression of urine. How far the administration of ether was to be blamed for this renal complication he was not prepared to say, but he was inclined to think that chloroform was not so liable to cause conjestion of the kidneys. The operation was performed for diseased ovaries and tubes, which were greatly crippling her.

The eighteen successful cases were performed for the following reasons and the following results:

Utertine Fibroids, cured 5. Improved 1.

Menorrhagia and ovaralgia, cured 2. Improved 1.

Ovaralgia, cured 3. Improved 1.

Epilepsy, improved 1.

Hystero neurosis, cured 3. Improved 1.

Insanity, unimproved 2.

Pseudo-muscular hypertrophy, unimproved 1.

In his experience the removal of the ovaries for uterine fibroids is almost always followed by a cure, that is to say menstruation ceases, the tumor rapidly lessens in size and no further inconvenience results from bulk pressure.

If the three cases of menorrhagia associated with ovaralgia, the lack of complete success in one was due to the fact that only one ovary could be removed. The other ovary was so matted in organized exudation as not to be distinguishable.

The failure in one of the cases of ovaralgia was due to the persistence of menstruation after a thorough extirpation of both ovaries. This is a very rare result but it will occasionally happen. Menstruation usually ceases in these cases after the lapse of a few months.

In the case in which the ovaries were removed for epilepsy, the result has not thus far been a cure, but the attacks come at longer intervals. Hardly time enough has elapsed for the woman to reap the full benefit of the operation, for she still has regular catamenial molimina accompanied by bloody expectoration.

Time enough has not yet elapsed to decide whether the two insane patients will be improved or be cured by the operation. Each one was an invalid and each one became physically well, but not mentally so. In Dr. Goodell's experience, which has not been a small one, those cases which exhibit aberration of intellect only during the menstrual periods, will almost always be cured by the removal of the ovaries. But cases of insanity in which the hallucinations are continuous, yet much exaggerated at the catamenial periods are by no means so likely to be cured by the operation, although they are generally very much improved. In any case about two years time must elapse before the nerve perturbations of this artificial change of life wholly disappear and a cure should not be expected before that lapse of time. What is true in mental cases and in purely nervous ones, is also true in a measure when even coarse lesions of the ovary are found. Hence the surgeon must not look for full results, or for complete freedom from groin-aches and pelvic pains, directly after the removal of even diseased ovaries and tubes. He must wait patiently for the ovarian nisus or habit to cease, until in fact the menopause has been wholly and fully established in every way.

In the foregoing nineteen cases, the spray was not used, but every other antiseptic detail was carefully carried out. The pedicle was tied with silk; the wound was closed by the same material, and dressed with gauze dipped in a glycerole of carbolic acid. Drainage was employed but once and that in the fatal case, but this had nothing to do with the issue. Eleven of the cases were treated at this private infirmary, seven at the Hospital of the University of Pennsylvania, and one at the patient's own home.

Dr. H. A. Kelly liked the moderate tone of the paper just read. He believed that here as in other fields of work, that we must be often satisfied with relative results. He liked the term "Ovaralgia" now better than he once did. Until we are better able to differentiate the exact nature of the lesion in some of these cases, he thought the term "ovaralgia" used generally is a good one.

He had a rare case of salaam convulsions which had been treated for a long time. He had been called in to decide the advisability of an operation and had refused to remove the ovaries. Two years later the ovaries had been removed and the patient cured. There did not seem to be any distinct connection between the pelvic and general condition.

Dr. M. Price asked Dr. Goodell if in these operation he had ever noticed on ligation any change in the number of

the heart beats? He had several patients, in whom, on the evening of the day of operation, he had found the pulse as low as 48. He had noticed somewhere that an operator found a drop of the pulse from 80 to 35 on ligating the ovarian nerve. Since then he had had the pulse beats counted on a number of patients at the time of the ligation and had found a drop of only 4 or 5 beats at most.

Dr. J. Price said that Dr. Johnston, of Danville, Ky.,had dwelt on the matter of slowing of the pulse very fully.

He thought that the explanation of continued pain after an operation was to be found in the adhesions of the intestines, etc. Some of his most satisfactory results had been obtained in cases of extensive adhesions. In a recently reported case the patient had complained of agonizing abdominal pain, an adherent omentum and a knuckle of intestine had been separated and complete relief obtained. He had operated on a number of cases where the only lesion found was a general adhesion of the whole mass of intestines. He had thoroughly separated them and had obtained most satisfactory results. Mr. Tait has repeatedly reoperated to free adhesions. He felt that operation for nervous disturbances was of very doubtful benefit and he never operated unless he found actual disease. He prefered handing the patient over to others.

Dr. M. Price related a case in which the whole trouble was due to adhesions. It was supposed to be a case of gall-stones. No disease and no gall-stones were found but the intestines were matted together. The adhesions were released and no pain was felt afterwards.

Dr. Joseph Hoffman. Dr. Price has refered to lowering of the heart beat after application of the ligature. In a case of adhesion the pulse which, on the day of operation, before ether had been given was 120, had gone down in a few hours after the operation to 58. After ten days it crept up to 80. This low register of 56 to 58 was sustained even in spit of the temperature being 101° or 102°.

Dr. B. C. Hirst had operated on a case in which a small portion of one ovary was left. The case had ceased menstruating even in spite of the part left behind. A stitch had passed through the remaining.

Dr. W. S. Stewart wished to know the effect of removal of both ovaries on menstruation—if at the time it should occur, there were any evidences, such as acceleration of the pulse, etc., as seen at the menopause.

Dr. Wm. Goodell had referred to the point suggested by Dr. Stewart in his paper and he said that just such symptoms appeared in these cases as appeared after the natural menopause. The full results were not obtained until after these ceased. He had never noticed a fall in the pulse beats as referred to, but he had often seen serious collapse follow the pinching of the ovary. He had seen the pulse fall to 97° and in one case below this. He thought that a counterfeited aneurism was by no means an infrequent symptom of ovarian disease. He had had a patient from a distance suffering from ovarian enlargement, aortic pulsation and other nervous disturbances, for which he prescribed. Afterward a local surgeon insisted that she had aneurism. A second examination convinced him that such was not the case. This was afterwards made evident by her passing through an exceedingly difficult confinement safely. There are two conditions in which he was willing to operate for the removal of the ovaries although he found no disease. One is *epilepsy* the other is *insanity*, for in these cases a woman should never conceive. He believed that the State should interfere to prevent men and women who suffer from epilepsy or from insanity from getting married. Indeed he is not sure that the day may not come when by act of legislature an insane man will be castrated and an insane woman will have her ovaries removed. He has had a good deal of experience with removal of the ovaries for insanity and has had some happy results—on the other hand he had been disappointed at times. In cases of epilepsy he had not had so much experience. He wished that gentlemen who have had such cases would report them.

Dr. C. M. Wilson had had three cases such as spoken of by Dr. Goodell. In two the result was negative. One patient was apparently benefited for some months, but recent reports say that there is a gradual relapse into the former condition.

Dr. H. A. Kelly had, about three years ago, operated on a girl with a brachial paresis, resulting from infantile palsy, with, also, epileptic attacks, pre- and post-menstrual in character. For some months there was no improvement but lately she has become better.

Dr. Kerlin had remarked to him that if in a good many of these cases of hopeless idiocy operations were performed removing the respective organs during the period of active growth, they would not develop some of their worse features and would be more easily managed.

Dr. J. M. Baldy had a case which, at the time of operation, looked like true epilepsy. There was excessive pain, vaginisimus and other symptoms. The pain was relieved but not the vaginismus, for which a subsequent operation was performed. The epileptic attacks had continued. They were, however, becoming much less frequent than formerally. Some two years had now elapsed.

Dr. J. Price operated on a patient with double pyosalpinx and epilepsy at the menstrual period and at no other time. The recovery was complete and the relief absolute. Some ten months after she went to another institute complaining of pain and was again opened. He wished to know whether or not in these cases convulsions come on during period in which the patient is in bed after operation.

Dr. Joseph Hoffman had a case of three months standing, which suffered from hæmato-salpinx and suppurating appendix. The patient had been having epileptic attacks. She had been entirely free from this since the operation.

Dr. W. S. Stewart said that he did not think that the ovaries should be removed in all cases of epilepsy as suggested by Dr. Goodell. He had an epileptic patient whom he had confined several times and whose children showed nothing wrong about the intellectual development.

He had removed the ovaries of a woman suffering from epileptic seizures and she had received no benefit from the operation. She is now in an insane asylum.

Dr. Goodell said that there was no disease so likely to be inherited as epilepsy and insanity. If Dr. Stewart lived long enough he would find the children refered to develop the disease.

Dr. H. A. Kelly reported

A CASE OF CÆSAREAN SECTION.

He operated April 17th of this year, delivering a living child and saving the life of the mother.

The patient, a slight woman, 4 feet 4 inches in height, had been in labor two weeks, her physician, Dr. Ireland, having watched by her bedside constantly for nine days previous to the operation. The waters ruptured four days before operation.

The estimated actual conjugate diameter was two and a quarter inches, although the pelvis was so choked by general œdema and hard cellulitic masses that it was impossible to recognize any structure with satisfaction, much less reach the presenting part of the child.

The patient's pulse at the time of operation was 142. The operation lasted 35 minutes. The after condition and convalesence was one of comfort and rapid recovery.

This makes the ninth case operated on in Philadelphia, the first being by Prof. Gibson in 1835, the historic case of Mrs. Reybold.

Dr. Kelly stated that he had since that time also operated upon another case for a relative indication, in preference to performing craniotomy upon a living child with the result of saving both mother and child; this question, however, of the relative indication was one of such importance, deserving such careful consideration, that he would reserve it for a more elaborately prepared paper at a future date.

Dr. Joseph Price read a paper on

THE CAUSE OF CÆSAREAN SECTION.

On the legitimacy of the Cæsarean

Section, there cannot be now, under certain restrictions and limitations a question. In extreme cases where hasty operation is necessary in order to save the life of the mother, where there is inpaction or where there is a tumor blocking up the uterine or the vaginal outlet, discussion or hesitation has little place and he can operate best who has all resources at command and acts without hesitation.

The real points for discussion in the light necessity of the Cæsarean Section, in order to terminate a labor, with greatest safety, first to the mother, then to be child, are first, "*The degree of contraction in the pelvis*," second, "*The advancement of pregnancy*," third, "*The chances for the induction of premature labor.*" As to the first: As an epitome of the latest generally received opinion, we have the statement of Greig Smith: The operation [Cæsarean Section] is said to be justifiable when the contraction is so great that we cannot expect to deliver the fetus *per naturales vias*, with or without embryotomy, and save the mother. The degree of contraction is generally stated as 1½ inches and below. But in cases in which much distortion exists, may have an upward limit of 2 inches."

Here then is a plain expression of conservative opinion as to the degree of deformity necessitating or justifying the operation. "As to the induction of premature labor," says Playfair, "there are few practitioners who would not deem it their duty to spare the mother the dangers of the Cæsarean Section," this being especially true since "there is no amount of deformity, however great, in which we could not succeed in bringing on miscarriage by some of the numerous means at our disposal."

The time at which premature labor should be brought on, varies, of course, with the degree of deformity of the pelvis, the tables of direction have been admirably constructed by Kiwisch. Briefly, the period for induction of labor, lies between the 30th and 36th week, and the corresponding sacro-pubic diameters vary between 2 inches and 6 lines and 3 inches and 5 or 6 lines.

Here then naturally follows a discussion of the means for inducing premature labor. Of the many methods proposed at various times, the one seemingly the best is the use of the soft catheter. Its introduction well into the uterus, for a distance of six of seven inches, is an almost certain means of speedily producing labor pains, safely.

I consider the British rule, that Cæsarean Section should never be an operation of election, but one of necessity, in general terms, as the safeguard of puerperal women. Once established the precedent that the Cæsarean Section is an elective procedure in obstetrics and thereby lay down also the principle that abdomino-uterine section is a safe procedure than the introduction of a soft catheter into the uterus before full term, the way is laid open to every aspirant for obstetric fame, who is the fortunate possessor of a wife, to find cases for his zeal at every court and corner in the city, if perchance he can of himself persuade the parturient woman of the necessity of delivery by "*the new natural method of delivery.*"

An axiom as to the operation is laid down by Lusk: "The precise limits in which the dangers of delivery through the pelvis rise to the level or exceed those from Cæsarean Sectian, is not easy to determine. It depends greatly upon the size and ossification of the child's head, and largely upon the experience and dexterity of the operator." The converse of this proposition is true also. The greater the experience and the more careful the observation of the operator, the less frequently will he be led to resort to Cæsarean Section, if he hold in mind that it is an operation of necessity not of election.

Two cases will illustrate the dangers here referred to, and the justness of these forebodings. *Case first.*—A woman already delivered of a living child, yet living at four years. Three other deliveries at term with the forceps. All of these children dead. No attempt at premature labor. In the fifth pregnancy she is decided upon as a case for Cæsarean Section. She passes into the hands of another attendant, who, after careful

pelvic measurements with a consultant, decides on premature labor. The woman delivers herself without instruments of a child whose head has a biparietal diameter of three and one fourth inches, the period of gestation being 8½ months. The previous measurements of the pelvic having decided upon an antero-posterior diameter of 3½ inches.

Case 2 is an actual operation. A woman in 3rd pregnancy. 1st child delivered after 30 hours, labor with instruments, dying soon after birth. 2nd pregnancy: She deliveres herself of a child of normal proportion *at full term, without instruments.* The child yet living. 3rd pregnany: *Cæsarean Section*—Recovery after protracted convalescence. Child still living.

Here are lessons full of instruction. What do they teach?

Dr. M. Price thought that the duration of labor had nothing to do with the choice of Cæsarean Section. He had delivered a woman two weeks since, who had been in labor seven days. It was an occipito-posterior position and the cervix did not dilate more than enough to permit the introduction of two fingers. He introduced his hand, dilated the os and applied Simpson's forceps. The delivery occupied an hour and a half, but the woman made a good recovery. Had the case been delayed a few days longer, there might have been a necessity for Cæsarean Section. When there is an inflammatory and œdematous condition of the pelvis, he thought there should be some forcible measures adopted for the delivery of the patient.

Dr. Wm. Goodell thought that the title of Dr. Price's paper was not a fortunate one, for the gentlemen who are called upon to perform Cæsarean Soction are usually not the attending physicians and they have had nothing to do with the previous medical attendance on the patient. He believed in the induction of premature labor and would do it in prefeference to the performances of Cæsarean Section. But often the patient herself will not submit to the induction of labor, Dr. Price would probably admit one day, into the "Retreat" an Irish woman who has had the most frightful labors and who had persistently refused, from conscientious motives to permit the induction of labor. He could conceive of cases where it would be better to perform Cæsarean Section although he had never as yet done so. Probably in some of the cases in which he had formerly opened the head, he would now do the Cæsarean Section. He thought a woman might go on safely in labor for an indefinite time, so long as the bag of waters had not ruptured, with very little danger to herself.

Dr. H. A. Kelly remarked that the bag of waters had ruptured four days before the operation. The pains had been very hard before this time and did not change in character afterwards, although the woman soon dropped into collapse. The pelvis was so choked by hard cellulitic mass, that it would have been impossible to dilate anything or reach anything above the mass. The second paper evidently referred to his case performed on a relative indication in preference to Craniotomy. That case he had not yet reported, reserving it for a full careful discussion. Where any such garbled distorted particulars had been hunted out he did not know, nor could he reply to criticisms offered in such a tone. His profession was his life and he came here to impart and still more to receive information in a spirit becoming the dignity of the profession, and he would not make life unhappy by taking part in any miserable bickering.

Dr. J. Price said that in a long experience in the Obstet. Dept. of the Philadelphia Dispensary he had numerous cases of deformed pelves and illy developed women, some of them very young. He would simply call attention to two typical cases. No. 1.—A case in which Dr. Eliot Richardson had five times done craniotomy or complete evisceration. This women applied in her sixth pregnancy to the Philadelphia Dispensary and was assigned to Dr. Joseph Fox for induced labor, in a period of five years he had induced labor three times in this case, delivering by forceps and saving two children—one still born. Case No. 2.—Also a Dispensary case, had in her five previous labors had the

children destroyed, the sixth was provoked at 8 months, 2 weeks, and she was delivered with forceps of a fine large male child. In a short experience at the Preston Retreat he had dealt with two cases of greatly contracted pelvis in both of which Dr. Goodell had twice or thrice induced labor, delivering living children. Recently two cases were sent in for induced labor or Cæsarean Section. The consultaants determined on the induction of labor. Both cases terminated favorably with living children—one of them was a forceps delivery, the other normal. These are only typical cases, but few of the many he could cite in his own experience.

If Dr. Kelly was satisfied that the last case given in the paper was his second Cæsarean Section, he was sure he was welcome to his knowledge, as no one else would wish to lay claim to it.

Dr. J. Price exhibited a specimen of a small male fœtus at about the 3rd month, removed from a case of extra uterine pregnancy. Patient healthy and twice married. There had been numerous attacks of pain. Recovery from operation was rapid. The following week he did an abdominal section on a woman who was unconscious and removed an extra-uterine pregnancy. She died 26 hours later. This was the sixth case of extra-uterine pregnancy which had developed in his practice in four weeks. One case he went into the country to operate and found the patient dead when he arrived. Dr. Formad told him that this was a very common result in his experience as coroner's physician.

He also showed a dermoid cyst, removed from a woman who had suffered from chronic peritonitis for years. Her physician had given her as much as a grain of morphia hypodermically and had sat up all night etherizing her, to relieve her pain. She was greatly emaciated with a rapid feeble pulse, high temperature and had been in bed for six weeks. Whole tumor euncleated, no ligatures required, intestines separated and irrigated—glass drainage. This is the 9th day and she is rapidly convalescing.

J. M. Baldy, Secretary.

At a Special Meeting of the Medical and Surgical Society of Baltimore, held September 27th, 1888, the following Preamble and Resolutions were adopted, Dr. D. W. Cathell, President, in the Chair, Dr. R. W. Mansfield, Secretary.

Whereas, The Medical and Surgical Society of Baltimore has learned with profound regret, of the death of their late President and colleague, Professor John S. Lynch, M. D. Therefore,

Resolved, That in the death of Professor Lynch the medical profession has lost an active member, a learned practitioner and an able teacher, and the community a man well worthy of the love and trust universally reposed in him.

Resolved, That we place upon record the high esteem in which Professor Lynch's personal qualities and professional attainments are held by this Society.

Resolved, That the Secretary be instructed to enter these resolutions upon the minutes, and to send an engrossed copy to the family of the deceased.

Resolved, That these resolutions be published in the daily papers.

Geo. H. Rohé, Chairman.
John W. Chambers.
Frank C Bressler.
Wm. H. Norris.
J. H. Scarff.

A Medical Badge.—An evening contemporary gives an account of an American physician as he starts from his office with an olive-coloured button in his coat, which he uses to designate that he is a physician. It would be more effective to put a big label on his hat or his arm, calling himself the medicine man. We hope this gentleman will remain singular in this respect. We are told, indeed, that this question of a distinctive badge is to come up before the medical societies in the coming session. We venture to think that the societies will find more worthy and urgent subjects for discussion. Doctors are not often far off when they are wanted, but it is too bad to expect them to carry a sign-board on their hat or coat. The suggestion savours much too strongly of advertisement.—*Lancet*.

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BALTIMORE, OCTOBER 6, 1888.

Editorial.

THE TREATMENT OF DISEASES BY MINERAL WATERS.—The treatment of diseases by mineral waters used externally and internally has been a subject much studied in England and on the Continent. The resources of our country, rich in mineral springs, valuable in the treatment of various diseases have gradually led American physicians to use mineral waters in the treatment of certain chronic and obstinate troubles.

Yet in glancing over the scanty literature of this subject, ltttle is seen to have been contributed to this study of these waters in connection with diseases. In many respects our spring and water cures will in time be compelled to adopt the plans followed in Europe at the most celebrated watering places before the good effects of the water cure be fairly tested. At most of our springs the patients are told to drink the waters, but this general supervision of the patient is so lax that the patient at first enthusiastic, becomes afterwards rather indifferent, and probably seeing no great improvement in a few weeks, gives up in despair. They seem to forget that the goods effects of taking mineral waters, when properly taken, often do not show themselves until after the patient has left the cure.

Again a large number drink the waters without advice at all. They have a general idea of a tonic or chalybeate water and also of an aperient water, and without further knowledge they proceed to gorge themselves with both kinds, under the delusion that the improvement will be in proportion to the amount taken. Such patients usually come under the physician's care in the end. In many European springs the patients are not allowed to drink of the water until their case has been thoroughly investigated by the physician and a diagnosis made. Another great obstacle to success at many of our so-called water cures, is the poor diet. Even when the physician and patient do their best to drive away the disease, a bad diet is always too formidable an opponent. So many such water cures give no attention to the food of the sick and ailing, and these are the very ones who demand a more carefully selected bill of fare to tempt a failing appetite. A carefully regulated water cure would do much toward building up health in this method of treating chronic diseases.

CALOMEL AS A DIURETIC.—There are some few medicines whose place in the materia medica is more strengthened as the study becomes more developed. Notwithstanding the fact that popular opinion has put mercury and bleeding among the things of the past—long out of fashion—the former, mercury, will always occupy one of the most important places among powerful and active drugs. The use of mercury and particularly of calomel in certain inflammatory conditions, and as a cholagogue are matters of daily experience, and it has long been known that its combination with digitalis and squill increased the diuretic properties of the two former drugs; but it is only recently that Stiller, Mendelsohn, Jendrassik, Locke, Paton and others, and more recently Dr. A. G. Auld (London *Lancet*, Sept. 22, 1888) and Mr. Talfourd Jones (*Brit. Medical Journal*, Sept. 22, 1888) have directed attention to the

powerful diuretic properties of calomel. Jendrassik came upon this accidentally. In treating a case of cardiac dropsy with small repeated doses of calomel he noticed that marked diuresis was induced. He used the same treatment, giving three grains three times daily, in seven cases, in six of which favorable results were noticed. After a day or two of treatment, as much as four to eighteen pints of urine were passed. The best action was obtained when some signs of salivation were noticed.

Naturally enough investigators set about to explain this hitherto unknown property of calomel. Locke and Paton thought that the diuresis was caused by an "increased production of urine, consequent on the supposed hæmolytic action of mercury on the blood corpuscles." This explanation hardly seems adequate and much more probable is the statement of Talfourd Jones that the calomel, in its passage through the renal tubules exerts a distinct influence on the secreting cells and thus increases the flow of urine. At all events the fact seems now abundantly proved that calomel has a decided diuretic effect and if good can come of its use in this direction, the explanation of its *modus operandi* can await further investigation. Ringer states that increasing the dose does not increase the purgative action and that one grain will often act as energetically as five. If diarrhœa is caused, it may be obviated by combining laudanum with the mercurial salt.

The Value of Simple Prescriptions. —It is very important that the young physician should form, at the beginning of his career, the habit of ordering but one or two drugs at a time in his prescriptions. He should devote much thought to learning the value, in different doses, of each separate drug with which he is to combat disease. This may be done without injury to his patients. The physician, in writing a prescription, should be able to give a good reason for the use of each ingredient, and this can never be properly done unless he has tried each remedy by itself in the various diseases in which it is thought to be of value.

Many doctors write prescriptions on the principle followed by the gunner who "shells the woods;" a course of action which shows conclusively that he has no definite idea where the enemy is or how to aim at him. Accuracy and efficiency in the use of remedies can never be attained by such methods, and he who uses them will never aid in the advancement of medical science. The prescriptions of the dark ages of medicine are simply astonishing. One useless drug or inert substance added to another, to the number of 30 perhaps, the prescriber having evidently a misty idea that each of them ought somehow to aid the other into effect. In the present day it is much better. Many doctors use blindly the formulas prepared for them by the manufacturing druggist, because it is affirmed, they do not know how to write prescriptions for themselves. Yet the files of the best drugstores show that physicians of the better class use, as a rule, only one or two drugs at a time. Still, even now, a word of caution is not out of place.

How often are ingredients uselessly and aimlessly added to an already efficient prescription? How often do we find drugs, which in many cases excite the nervous system, combined with those known to be sedatives, so that, to produce quiet, dangerous or fatal doses must be given? How often do we read glowing accounts of the sedative effects of some new drug, and when we reach the end of the report, find that it was administered at the same time as opium or some other tried soothing agent? Who can learn the indications for treatment in pulmonary hæmorrhage, for instance, if he treats it always with half a dozen drugs, of various powers, at a dose?

By learning to know personally, as it were, the character of each drug which he uses, the young physician will be more successful in his practice, and the unexpected failures which he meets in his therapentics, instead of leaving him

to aimless wonder at his ill success, will lead him to study more carefully the peculiar features of the case before him, and to seek by change of dose or drug to come out victor over all difficulties.

After he has learned the use of separate drugs, he will be able to combine them intelligently, with a clear view of the action to be expected from each ingredient.

Miscellany.

Extra Uterine Pregnancy; Operation Through Douglas' Cul-de-Sac.—The operation was performed by Dr. Hunter McGuire, of Richmond, on a patient aet. 40. Conception took place March, 1879. Foetal movements ceased the following December. Then for six or seven months there was hectic fever, with great emaciation. Then menstruation returned with improvement in symptoms until November 18th, 1887. Then there was sick stomach and vomiting till February 4, 1888. Since that date there had been a continued discharge of pus from the rectum together with 18 or 20 small bones. On admission patient was emaciated; and was taking large doses of morphia for pain. Anterior abdominal wall thin and freely movable; the idea of laparotomy was therefore given up. The patient being under chloroform and a hand being introduced into the rectum, a communication was found just below the sigmoid flexure admitting barely two fingers into the foetal sac. The vertex of the child's head was felt presenting at this opening. The danger of hemorrhage in so feeble a patient led to the abandonment of the idea of enlarging this opening. The patient was now placed in Sims' position with Sims' Speculum introduced and an assistant pressed on the abdomen until the cyst could be felt through, Douglas' Cul de-sac. With the thermo-cautery, at a dull red, heat, an opening was made into the cyst and gradually enlarged with the cautery-knife till it admitted three fingers. The extremely offensive foetus was then broken up and removed piecemeal, the placenta being left *in situ*. A large drainage tube was left in the cyst through which it was flushed every three or four hours, for a week with bichloride solution (1 to 4000) and after that "chloral thymol" (℥j to a pint of water). Recovery was rapid and in three weeks the patient had left hospital. Two months later the rectal opening was closed and only a minute sinus communicated with Douglas' Sac. He had ceased using morphia. Dr. M. always precedes serious operations with quinine. He retains the drainage tube in such cases as the above by splitting its end rolling up the split extremities, and tacking them with silk. The end of the tube is introduced by compressing it with thin bladed forceps, unlocking the latter in the cavity.—*Va. Med. Monthly.*

Bacillus Lepræ.—Beaven Rake, M. D., London Medical Superintendent of the Trinidad Leper Asylum, makes a "report on cultivation experiments with the Bacillus Lepræ," which concludes has follows:

"My conclusions are the result of four years' work, and I here summarise them:

1. At a tropical temperature and on the ordinary nutrient media, I have failed to grow the bacillus lepræ.

2. In all animals yet examined, I have failed to find any local growth or general dissemination of the bacillus after inoculation, whether beneath the skin, in the abdominal cavity, or in the anterior chamber. Feeding with leprous tissues has also given negative results.

3. I have found no growth of the bacillus lepræ when placed in putrid fluids or buried in the earth."—*British Medical Journal.*

Sleeping with the Head North.—The superstition that human beings should sleep with their heads to the north is believed by the French to have for its foundation a scientific fact. They affirm that each human system is in itself an electric battery, the head being one of the electrodes, the feet the other. Their proof was discovered from experiments which the Academy of Sciences was allowed to make on the body of a man who was guillotined. This was

taken the instant it fell and placed upon a pivot free to move as it might. The head part, after a little vacillation, turning to the north, and the body then remained stationary. It was turned halfway around by one of the professors, and again the head end of the trunk moved slowly to the cardinal point due north, the same results being repeated until the final cessation of organic movement.—*Pacific Record.—Journal of Nervous and Mental Diseases.*

Combined Chloroform and Cocaine Anæsthesia. — Professor Obalinski of Cracow, remarking the antagonism between chloroform and cocaine, determined to take advantage of it in anæsthesia for operative purposes, and has now employed the combined chloroform and cocaine method in twenty-four cases with, as he states, the most satisfactory results. He first administers chloroform by means of an Esmarch's mask until the stage of tolerance is reached, which is generally in from four to twelve minutes, with the use of from one to three drachms of chloroform. He then injects into the region about to be operated on a solution of cocaine of the strength of from 3 to 5 per cent., the total quantity of cocaine injected being from three to five-sevenths of a grain. Even more than this might, he thinks, be safely used, both because chloroform is the best antidote to cocaine and because part of the cocaine is about to be removed from the body by the operation. After the injection no more chloroform is as a rule given, unless in protracted operations, when very small quantities are administered at considerable intervals. For this method several advantages are claimed, amongst others the following:—A smaller quantity of chloroform is sufficient; vomiting is very rare; the depression on awaking is much slighter than when chloroform only is used. The only disagreeable symptoms which Professor Obalinski has observed have been excitement and throwing about of the arms in some nervous people, but as this occurs when chloroform alone is used, it is not at all certain that it ought to be ascribed to the cocaine. He recommends the combined method for extensive operations, finding the local use of cocaine usually quite sufficient to render minor operations painless.—*Lancet.*

A Distinction and a Difference.—The proprietors of the secret for making "Ingluvin" have circulated a card in which they warn all persons not to confound them with the proprietors of the secret for making "Safe Liver and Kidney Cure." This effort towards distinction is not altogether unnecessary, for besides a similarity in names there is also a resemblance in the products of those two houses in that the unknown quantity is a considerable factor in both "Ingluvin" and the "Safe Cure." The treatise on pathology and therapeutics that inclose some of the packages of these two firms might also lead to mistakes in identity: they are both addressed to the consumer and they both tend to render the care of the physician superfluous to the credulous reading public. A very great difference does exist in the business policy of those two makers: the "Safe" people lay no claim to legitimacy, and they ask no help from the medical profession in the sale of their goods.

The etymology of the word "nostrum," from the Latin *noster*, ours, makes it a peculiarly appropriate title for proprietary and trade-mark medicines, and the meaning attached to it by Webster, "a medicine, the ingredients of which are kept secret for the purpose of restricting the profits of sale to the inventor or proprietor," is accurately descriptive of many remedies in common use by physicians, but to which the application of the opprobrious term nostrum, would be shocking to the fine sensibilities of their enterprising owners.—*Pittsburg Medical Review.*

Death by Drowning.—Dr. Paul Loye, according to the *Lancet*, has published some observations made by him, bearing on the phenomena which precede death by sudden immersion. The first stage of deep inspirations lasts about ten seconds, followed by a re-action caused by the resistance to the entrance of water into the

bronchioles. This lasts for a minute, and is succeeded by arrest of respiration and loss of consciousness. Finally the scene closes with four or five respiratory efforts—the last. Immersion causes an immediate rise in the blood-pressure, with slowing of the heart-beats. The action of the heart remains slow but strong till death ensues. The pressure gradually lessens, but rises just before death, to fall to zero immediately afterward. The heart sometimes continues to beat feebly for about twenty minutes. The result is the same in animals which have been tracheotomized: the period of respiratory resistance is therefore due to the respiratory muscles, and not to spasm of the glottis.—*Science.*

Pyogenic Bacteria.—MM. Albarran and A. Halle have studied a pyogenic infective organism commonly occurring in purulent urine, and believed to be capable of producing suppurative inflammation in the urinary organs and tracts. Acting upon the renal tissue, it sets up the diverse lesions of suppurative infectious nephritis, either gaining an entrance from the pelvis of the kidney or being carried to the cortex in the blood of the renal vessels. After entering the blood it may induce subacute, acute, or chronic infective lesions, which often prove fatal. These conclusions prove the necessity of maintaining absolute asepsis in all operations practised on the urinary passages, including of course catheterism, and the advisability of a previous bacteriological examination of the urine in all operations in which bleeding must occur. This preliminary examination often shows the presence of bacteria, and affords an indication for a preparatory antiseptic treatment. The biology of this bacterium has also been studied.—*Lancet.*

Wounds of the Heart.—Wounds of the heart are always of particular interest because they are so often of medico-legal importance. It is popularly believed that when the heart is injured death must immediately follow, and even physicians sometimes make statements to this effect on the witness stand. But there are now sufficient cases on record where life has been prolonged for some time after the heart has been severely wounded, to upset the theory that such wounds are necessarily fatal. A Russian physician has lately reported the case of a Cossack who received a stab from a poignard which the autopsy showed pierced the wall of the left ventricle. Yet the man lived more than a month, was discharged from the hospital and returned to duty, but fell dead when he attempted to lift a heavy weight. The heart wound was closed by a soft cicatrix which ruptured, and it looked as if the recovery would have been permanent had longer rest been enforced.—*Southern Californian Practitioner.*

The Water-Supply of Summer Resorts.—Dr. Cyrus Edson, of New York, chief inspector of contagious diseases, in a recent interview is reported to have said:

"The water-supply of the summer resorts in this country is almost invariably as bad as can be. The most attractive watering-place is often but a dangerous guest trap baited with alluring scenery, fresh air, fishing, boating, and other things attractive to its game of gathering the young and old that it may wreak its ills upon them. During the months of June and July I visited eight popular resorts. All were on the sea-coast, and were situated in villages or consisted of congregations of cottages. All were supplied with water from dug or driven wells in depth about twenty feet. The drainage was uncared for, so far as preventing contamination of the wells was concerned. At one place—the only one where a sojourn of ten days was made — nearly all the guests were found suffering from diarrhœa of more or less severity. What would be the consequences, think you, if a few cholera bacilli should find their way into towns such as this? The unacclimated, or rather the unacquainted, visitor from the city, after a few days in such a town wonders 'what ails his bowels.' It is not much of a mystery to experts or diagnosticians."—*Sanitarian.*

Medical Items.

Dr. G. M. Sternberg has left for Havana to further investigate the yellow fever.

Dr. Henry Rolando died Thursday night of typhoid fever at his residence on Park Avenue.

The Cincinnati *Lancet-Clinic* is becoming quite a formidable rival of *Judge* and *Puck*.—*Southern California Practitioner.*

The death is announced of Dr. Josef Fabricius, Professor of Ophthalmology in Buda-Pesth, at the age of fifty-three.—*Lancet.*

Professor Virchow is in Milan, writes a correspondent on September 13th, and the leading physicians of the city have given him a more than professional welcome.—*Lancet.*

Lawson Tait has three assistants, each of whom pays him one hundred dollars a month for the privilege of seeing and learning his methods.—*Northwestern Lancet.*

The corner stone of the new addition to the City Hospital in connection with the College of Physicians and Surgeons was laid with appropriate ceremonies on Sunday, September 30th, 1888.

A Garbage Crematory for Philadelphia is said to be contemplated. New York should follow the lead of cities like Chicago, Montreal, and others, and erect one or more of these life-saving buildings.—*Medical Record.*

A German Hospital is to be built at San Remo, and subscriptions are being collected. The Emperor Frederick subscribed a considerable sum to this object, which he had much at heart.

A New Medical College in Brooklyn.—Brooklyn, N. Y., has a new institution, called "The College of Physicians and Surgeons of St. Mary's Hospital of the City of Brooklyn."—*Medical Record.*

A Happy Land.—There is not in France a medical school which has a professor of gynecology, nor is there in the whole country a special hospital for the diseases of women.—*Medical Record.*

Circumcision.—It has been decided by the Jewish authorities of Berlin that in the future the rite of circumcision shall only be performed by duly qualified medical men.—*Med. Record.*

Unsavory Peptones.—It is stated on good authority that the excrements of dogs are now collected in Paris, and worked up into "peptones" and powdered "extracts of meat." Paris still leads the world in some things.—*Medical Record.*

The professorship of Anatomy at the Dundee Medical School has been filled by the appointment of Andrew Melville Paterson, M.D, C.M. Edin., M.R.C.S., Lecturer on, and Senior Demonstrator of, Anatomy in the Owens College.—*Lancet.*

Antipyrine is now in such general use in Paris that people do not hesitate to use it without the advice of a physician. It is chiefly employed for the relief of headache "the next morning," but is also experimented with in other troubles.—*Northwestern Lancet.*

With the beginning of this month the various Medical Societies will hold their opening meetings. On Monday night the Electro-Therapeutical Society held its first meeting of the season, and on Friday night, the Clinical Society held its annual meeting for the election of officers.

Dr. J. S. Lynch, of the faculty of the College of Physicians and Sugeons, died Thursday, September 27th, shortly after 5 o'clock, at his home, No. 4 South Broadway. He had been in bad health for a year past, and had been sick in bed since the middle of last August, with jaundice. His funeral took place on Saturday afternoon, September 29th, and was attended by a large number of the medical profession of this city.

Opening of Woman's Medical College.—The seventh annual session of the Woman's Medical College, of Baltimore, commenced Monday, Oct. 1st. Dr. T. A. Ashby delivered the opening address. In June last the college was removed from North Eutaw street, near Franklin, to the northeast corner of Druid Hill avenue and Hoffman street, and this is the first session in the new quarters. There is a larger class in attendance than at the opening of any session for several years, and the outlook for the success of the college is very good. It has a three years' graded course of a high standard, with very greatly improved facilities in the new building. Dr. Richard H. Thomas is dean of the faculty.

Dr. T. E. Statterhwaite, a short time ago, showed the New York Post-Graduate Clinical Society a new stethoscope that he had used for some time with great satisfaction. The bell-shaped pectoral piece of hard rubber, and measuring about one and one-quarter inches in either dimension, is divided into two chambers, of which the inner one only communicates with the ears through the two regular tubes. In the outer chamber, however, the air is exhausted by a rubber bulb connected with the chamber by a tube, and in this way the walls of both chambers adhere tightly to the chest. Naturally, sound from without is effectually shut off at that point, and as the instrument is said to be very easy to manage, and especially useful when the patient is in bed, it may be found an improvement on the old. The stethoscope is made by P. W. Soule, a dentist of Woonson (Monson?), Mass.—*Boston Med. and Surg. Jour.*

Original Articles.

MARYLAND DOCTORS: THEIR PUBLIC AND PROFESSIONAL SERVICES.

(From an address delivered at the annual meeting of the Pennsylvania, Delaware and Maryland Union Medical Society at Birmingham Park, Pa., August 30, 1888.)

BY GEORGE H. ROHÉ, M.D., BALTIMORE, MD.

The public services of the country bear upon their rolls the names of not a few Maryland physicians. James McHenry was Secretary of War. Wm. A. Hammond and Robert Murray, both still living, were Surgeons-General of the Army. James C. Palmer, P. J. Horwitz, Wm. Maxwell Wood, and Philip S. Wales were Surgeons-General of the Navy. Members of the medical profession of the State have sat in both houses of the U. S. Congress.

Philippe Ricord, whose name is known where medical books are read, was born in Baltimore in the first year of the present century. (I may add also for the comfort of my Pennsylvania friends that Ricord began the study of medicine in Philadelphia.) The first graduate of the first medical school in America was a Marylander. John Archer, of Harford county was the man, and the University of Pennsylvania the school. Robley Dunglison, the incomparable teacher, and "beacon light of medical literature," as Gross termed him, was a professor in the University of Maryland when his monumental dictionary was issued from the press.

Our patient and diligent medical bibliographer, Dr. John R. Quinan to whose untiring industry I am indebted for many of the details in this paper, has shown that one of the first, if not the very first vaccinator in the United States, was a Marylander; that a Marylander established the first vaccine institution in the United States; that the first State law providing for the gratuitous distribution of vaccine matter was passed by a Maryland legislature, urged by Maryland physicians; that the first college of dentistry in the world was founded in Maryland; that the first systematic work on diseases of the eye, the first original work on dentistry, and the first systematic treatise on American natural history in the United States were produced by Maryland physicians; that the common iliac artery was ligated for the first time in the world by a Maryland surgeon; that the recti muscles of the eye were divided the first time by the same brilliant surgeon, who also was the first one in the world to perform the cesarian section twice with success in the same patient. This was William Gibson, whom Maryland relinquished to her northern neighbor where he taught surgery for thirty-five years in the University of Pennsylvania.

So much for individuals. What has the profession in our State accomplished as a body? Here it likewise can hold its front with the profession of other states. Its State organization, the Medical and Chirurgical Faculty, with its noble purposes and comprehensive privileges, dates its foundation in the last century. Maryland was one of the first, if not the very first State in the Union to impose upon the profession restrictions in regard to educational and technical acquirements. The Faculty by its charter was invested with powers, which gave it the right to decide absolutely upon the qualifications to be demanded of everyone who sought to practise medicine in the State. From the decision of the Faculty there was no appeal. For a time these powers were wielded with rare judgment and discretion, but they were finally allowed to fall into a state of noxious desuetude from which they have never been recovered. I say *noxious* desuetude because if these powers had been properly exercised throughout the second and third quarters of the present century many evils of which just complaint may be made would have been averted. The baneful influence of unrestrained quackery, both upon the profession and the public of the State cannot be estimated, and in spite of recent legislation it will be long before the parasitic virus which has been permitted to multiply in the body professional is entirely destroyed. I fear it will require

a stronger germicide than our present medical act.

What special causes contributed to lessen and finally almost absolutely destroy the influence of the organised profession of our State, it is needless to seek at present. It may suffice to say that prominent above all was the lack of that spirit of unity, and harmony, and pride in professional achievement which the French call *esprit de corps*. In the absence of this unifying influence, this solidarity of interests and sentiments, private jealousy was allowed full sway. Egotistic estimates of personal worth led to detraction of an opponent's merits, and not rarely to public denunciation and vituperative abuse. This could lead to but one result, *disunion*.

Happily, the great sectional struggle which by first dividing the people of the country, ended by making them better acquainted with each other, had apparently a like good influence upon the profession of our State. The fighting Adam, perhaps a survival of savage ancestry, is inbred in the physician as well as in the soldier, but the former's professional training subjugates the desire to main and kill and turns it into the passion to save. From the fiery furnace of the war, where the northern and the southern soldier, and countryman and the townsman, the foreigner and the native, the aristocrat and the slave, learned that there is manhood in every man, and that this manhood is a nobler metal and outweighs all ignoble meannesses, the Maryland doctor came home triumphant because there was no defeat for him no matter what uniform he wore. His fight was againt death, the common enemy of both armies. In returning home he forgot his ante-bellum personal differences and joined hands with his fellows of whatever political and religious creed to labor for the advancement of his profession. He had to work hard for awhile to convince the public that he was sincere and honest. They could not believe at first that medical men could mutually forgive and forget the hard and mean things they had said of each other; that men of strong prejudices could shake hands across the dirty chasm in which was buried the garbage of petty innuendo, jealous malice, peppery crimination and vindictive recrimination. But your true Marylander is tenacious of purpose and when he makes up his mind to do a thing it's got to be done if within the range of possibility. The profession now worked for union and they worked to good effect. The first fruit of their activity was a new act of assembly regulating the practice of medicine, imposing the duties which had been neglected by the Medical and Chirurgical Faculty upon an able Board of Medical Examiners. Our friends of the legal fraternity, however, preserving their traditional character of obstructors of justice soon showed that rascality sometimes triumphs, temporarily at all events, over honesty and unselfishness. For twenty years longer we were compelled to submit helplessly to the invasion of our State by troops of irregulars from all parts of the country, but particularly from Pennsylvania, Virginia and West Virginia. In these, and some other States, the legislatures had responded to the calls of the people to save them from the leeches and vampires, who, as old Sir Thomas Browne has it, "delude not only unto pecuniary defraudation but the irreparable deceit of death."

Fortunately, however, our last General Assembly was brought to see the importance of some restriction of medical practice, not because there are too many doctors, but because under the laws as they were, anyone could assume the title of "doctor," prescribe for the sick, and sign death certificates. Some of these latter documents as filed in the health department of Baltimore, make very suggestive reading. For example there is a certificate of death from "cholera infantum" in an individual who had arrived at the mature age of 45, "chronic metritis" in a subject of the sterner sex, and others equally amusing—I was about to say, were it not that this ignorant trifling with human life is too serious a thing for levity.

The law passed by our last legislature is not perfect. Far from it; but on the principle that half a loaf is better than no bread, the profession accepted it with

its many shortcomings, hopeful of good results. The profession of Maryland expects the State Board of Health, which is charged with the execution of the law, to do its duty and drive our quacks over the border into Delaware, so that our little neighbor may be spurred up to take similar action.

The principle of regulating medical practice by law has been contested by some, because such laws interfere with the privileges of some people. But laws against killing and stealing also interfere with the supposed privileges of some. The most eminent jurists have decided that States have the power to pass and enforce such laws. It is to be regretted that there is such lack of uniformity in the medical laws in force in a number of the States. Thus, in Illinois, West Virginia, Indiana, California, Missouri, Wisconsin and Maryland a diploma from "a medical college in good standing" is accepted as primâ facie evidence of the holder's qualifications to practise. In Alabama, North Carolina and Virginia an examination is required from everyone desiring to practise in one of the States mentioned, irrespective of the presence or absence of a diploma. In Minnesota there is a peculiarly stringent provision, requiring four years of medical study, before an examination will be granted and no one can practise in the State without a license from the Examining Board. In the Empire State, something like a simple recording of the diploma is all that is necessary, while in the great Commonwealth, within whose borders we meet to-day, the doctrine of protection to home industry is so firmly rooted that it is carried to its logical extreme in the medical registration law which should be entitled "An Act for the Protection and Succor of those Infant Industries, the Medical Colleges of Pennsylvania."

In 1887, while Chairman of the Section on State Medicine of the American Medical Association, I appointed a committee to submit a scheme for a uniform law which could be recommended by the profession to the legislature of every State. I am informed that this committee failed to report at the last meeting of the association, perhaps because the differences of opinion were so wide that a compromise was impossible. Perhaps it is just as well that a good trial of the several plans be made in order to determine finally which is best and then to assimilate gradually to that one.

A subject of vital importance to every practitioner of medicine is that of medical education. What is the record of the State of Maryland in this particular? I believe I can say truthfully that my State is second to none in the successful endeavor to move forward in this great common cause.

At the outbreak of the civil war there was only one medical school in the State —the University of Maryland—beloved and honored alma mater of so many of us Marylanders. After the sound of the conflict had died away and the Maryland doctors came home from the war, reenforced by many of their comrades from other States, the experience gained on the field and in hospital sought an outlet through the professorial chair. The demand for professor's chairs was, however, greater than the supply of these articles of furniture in the single school then existing, and another school, the Washington University, which had previously existed, but had passed into a condition of suspended animation, was resuscitated by the efforts of a number of men of force and talent, who soon made it a formidable rival of the old university.

But the supply of professorial chairs was still too limited to meet the demand, and in 1872 the College of Physicians and Surgeons was organised and in four years had grown so vigorous that her elder sister, the Washington University capitulated and relinquished her charter to the younger rival. In 1881, 1882 and 1883, yet other schools were organised and we now have in Baltimore five medical schools, one of which is exclusively devoted to giving the gentler sex—"the new wing of the profession"—the facilities of a first-class medical education.

The belief is so wide-spread that a multiplicity of medical colleges is an unmixed evil, that I almost hesitate in this assembly to express a contrary opinion,

But if we remember the well known and unquestionably truthful motto, that competition is the life of trade, we shall arrive at the conclusion that competition among medical colleges may be useful in developing the work in which all are engaged. Of one thing I am convinced, namely, that the standard for graduation in all the schools in Baltimore at present, is much higher than it was in the single school in existence there during the war, or in either of those in operation in 1870. I have not the slightest doubt that the lively competition among the schools has been a large factor in raising the standard to its present height. I have no sympathy with the unjust opinion which regards every medical teacher as a swindler and every medical student as a rogue. I believe both teacher and student are honest and in favor of the best education, otherwise colleges with the lowest standard would have the largest classes, which is by no means the case.

When I look back over even the comparatively brief interval between my graduation (in 1873) and the present time, I am amazed at the progress that has been made. I heard *three* lectures on the entire branch of skin diseases, and saw actually *two* cases of skin disease in the clinic during my term of college study. At present, what school of respectability ventures to ignore the demands of this important specialty by failing to supply a full, or a least a clinical professorship?

Nervous diseases occupied a few hours of the time of the professor of practice of medicine, while pathology, laboratory work in physiology and chemistry were looked upon as fancy studies, suited only to aristocrats who did not need to practise for a livelihood. In these fifteen years practical obstetrics, dermatology, hygiene, pædiatrics, neurology, laryngology, pathology, bacteriology, and practical laboratory work in chemistry and physiology have demanded and gained admission to the regular curriculum of the colleges in our State. The time of the sessions has been extended on an average of one month, the number and severity of the examinations have been increased and the classes turned out with the diploma of M. D., are undoubtedly better qualified for their work than ever before.

The amount of work now crowded into a session is so enormous that thoughtful teachers are beginning to question whether the cramming process is not carried to too high a degree. One of two things must happen should the curriculum be still further expanded: either the time of study must be extended, or the instruction will be inefficient, and the examinations merely a measure of the capacity of the student for cramming.

Personally, I am unqualifiedly in favor of an increase in the period of study, and I believe that the schools in my State will soon be in the forefront of the movement which demands a minimum of three years' attendance in a graded series of studies.

The noble foundation of Johns Hopkins shown in the magnificent hospital nearly ready for occupancy, with its medical school still to be built, will do much to elevate the pursuit of medical study to a higher scientific plane than is possible in the general run of medical colleges. It is to be regretted that financial embarrassments have temporarily checked progress on this great institution. It would be absurd to expect that the opening of the medical department of the Johns Hopkins University will revolutionise medical education in our State, but there can be no question that it will exercise great influence upon the future of the schools, and their teachers and pupils, which are brought into neighborly contact with it.

The organisation of the profession in our State still lacks that cohesiveness which it seems to possess in Pennsylvania, but we have many local societies in which excellent scientific and practical work is done. It would be invidious to specify any society in particular, for all are doing good work in their special lines.

For literary productivity the Maryland physicians of the past have not been particularly noted, bnt in recent years, stimulated, perhaps, by the excellent

medical journal published in our chief city, the Maryland doctor has wielded the pen with greater ease and freedom. Three of the teachers in one of our medical schools have within the past three years published text-books, and the names of many others are familiar to the readers of the journals and collective monographs upon special subjects.

I have endeavored to give you a brief sketch of the professional movement and present status of the physicians of our State. Another hand than mine could have traced it in a more interesting manner. To many of you, the facts I have detailed are familiar, but I trust I have not been tiresome in trying to show you what the Maryland doctor is in his professional and public relations. Had I the gift of eloquence the Maryland doctor would furnish a worthy theme for a glorious word-painting. Being only a plain, blunt, prosy, matter of fact doctor myself, I must leave the pictorial embellishment of the subject of my discourse for another. Possibly at some future reunion a feather from "the new wing of the profession" will lay on the colors more gracefully, and then you will see the Maryland doctor as he is—an honest, straightforward, unassuming gentleman, a lover of his profession, in general, and of "the new wing" in particular.

SYPHILIS OF THE LARYNX, TRACHEA, AND BRONCHI.*

BY J. SOLIS-COHEN, M.D., OF PHILADELPHIA.

(*Continued from page* 448.)

Etiology.—The probable condition attracting the manifestation of constitutional spyhilis to the larynx is superficial catarrhal laryngitis from hereditary or acquired proclivity, or from exposure, or from abuse of tobacco, alcohol, or other indulgence, or from misuse of the voice. Such exposures cause more males to be affected than females, as there is no assignable sexual reason for preponderance. Tracheal lesions, on the other hand, have been reported more frequently in females, probably because the laryngeal lesion is attended to more promptly by the male. Syphilitic disease often extends by continnity from the oropharyngeal region to the larynx, principally along the pharyngo-epiglottic fold to the epiglottis, and thence along the aryteno-epiglottic fold, and from the two structures to the interior. Hereditary syphilis has been observed in intra-uterine life (Monti: *Medical Times*, Phila., April 28, 1877, p. 336.). Hereditary syphilis of the intensest character has been occasionally observed at a very early age, as in the case of an infant whose symptoms began with coryza in the tenth week of life, and terminated in death by suffocation from stenosis nineteen days later. Post-mortem, with examination, revealed, in addition to syphilitic lesions in the liver, destructive perichondritis of cricoid and left arytenoid, and fatty degeneration of arytenoid and both posterior crico-arytenoid muscles and the left superior nerve (Fränkel: *Wien. med. Woch.*, 1868, Nos. 69, 70, cited by Ziemssen and by Mackenzie). Children less than a year of age often show laryngeal lesions of hereditary syphilis, and ulcerative lesions have been seen at two months of age (Parrot: *Prog. Méd.*, 1878, p. 635). Many cases occur in children but a few years of age, and sometimes the manifestations are deferred to the period of puberty or even later. Indeed, in opposition to the received opinion of syphilographers, I have reason to believe that in a few instances I have seen its manifestations delayed as late as the third and even the fourth decennium. True, in such instances as the latter it is quite possible that infection may have been acquired in some method unknown, without having been followed by any secondary manifestations, or that early hereditary manifestations may have escaped recognition. The secondary manifestations occur most frequently in adolescents and young adults. They appear most frequently at periods varying from a few weeks to a few months after infection, sometimes as late as the fourteenth or seventeenth month (Morgan). Tertiary lesions are

* Read before the Philadelphia County Medical Society Sept. 12, 1888.

most frequent at rather maturer ages, and occur occasionally in quite advanced life. They have been reported as early as the sixteenth month (Türck, op. cit.), and as late in their first appearance as the thirtieth (Türck), and even the fiftieth year (Mackenzie). Tracheo-bronchial tertiary lesions have been reported as appearing as early as the ninth month after infection, but these lesions are usually coincident with the laryngeal lesions when not immediately consecutive to them.

Most of the instances of tracheal syphilis occur in individuals whose employments expose them to irritation from dusts of various kinds (Vierling: *Deutsches Arch. f. klin. Med.*, 1878, Bd. 21). Hereditary tracheo-bronchial syphilis is far less frequent than the laryngeal forms. It has been observed before the age of puberty.

Diagnosis.—Differential diagnosis between secondary and tertiary lesion is sometimes difficult, particularly in the transitionary period especially described by Whistler. The discriminating characteristics are less well marked in the laryngeal syphilis, than in any other variety.

It may, however, be broadly stated that secondary lesions, erythematous, papular condylomatous, or paralytic, are superficial; and that tertiary lesions are gummatous, ulcerous, carious, necrotic, and deep-seated. Laryngitis occuring within a few months of infection, is almost invariably secondary. Lesions appearing before the termination of the third year, secondary, or transitional: and those appearing after the termination of the third year, tertiary. Nevertheless, secondary lesions may be ulcerous, and undoubted tertiary manifestations have been recognized even within nine months of infection.

The history of the case, and the previous or actual presence of manifestations of syphilis elsewhere, are the main positive factors in the diagnosis of specificity, especially in the early stages of either variety. The later lesions of tertiary syphilis are often sufficiently characteristic; sometimes not at all so. In cases of doubt, antisyphilitic treatment will almost always detect a lesion of syphilitic origin, but not invariably. Hence, in instances of strong suspicion, the various methods of antisyphilitic medication should be thoroughly tried before that test is abandoned. This suspicion is justifiable in cases of obstinate chronic laryngitis, whether ulcerative or not, in individuls in whom no other appreciable local or constitutional cause can be detected.

Laryngoscopic inspection is an invaluable aid in diagnosis; though practically indispensable, it is inadequate for fully appreciating the extent of deeply seated lesions; and its revelations are not always sufficient to establish the diagnosis in the absence of corroborative lesions elsewhere. Erythematous and catarrhal inflammations of secondary syphilis, when diffuse, are not to the ordinary eye distinguishable from similar non-specific conditions. Circumscribed erythema, though usual in syphilis, occurs in non-specific laryngitis also, consequently that condtion alone is insufficient for discrimination. Patchy erythema on the vocal bands, and elsewhere, may be regarded as characteristic. Not so, however, the shaded pigmentations at the extremities of the vocal bands.

Symmetric bilateral localization of erythematous and other patches is highly characteristic of secondary syphilis; but a contrary condition by no means excludes the diagnosis. Isolated bilateral congestion of the super-arytenoid structures and of the Wrisbergii has been cited as pathognomonic. Nothing can be more fallacious or misleading. Enlarged inguinal and post-cervical glands furnish excellent corroborative testimony of syphilis.

Papules, or condylomata, upon an erythematous mucous membrane, are to be considered pathognomonic. Their recognition may require an exceptionally good light on the one hand, or repeated examinations on the other. They must be carefully discriminated from minute collections of mucus or of saliva.

Diffuse gummous infiltration is to be distinguished first from inflammatory syphilitic infiltration by the coexistence of gummous processes elsewhere, its more

circumscribed contour, and its sharper definition. Differential diagnosis is much easier after it has reached the stages of liquefaction and ulceration.

Syphilitic ulceration usually proceeds from above downward, rarely in the opposite direction, and often in extension from ulceration in the pharynx. Repair usually proceeds from below upward. Apart from these guides there is nothing positively characteristic enough to determine an ulceration to be syphilitic in character by mere inspection.

The absence of pain has been regarded as characteristic, but, on the other hand, the ulcerative lesions of syphilis are sometimes attended with lancinating pains of the most severe character.

In the gummatous stage of tertiary syphilis diagnosis is not difficult. Nodular syphilides and gummata are recognized in the forms and at the localities mentioned under pathology, page 441. They may be confounded with other neoplasms, and with abscess. In cases of doubt, antisyphilitic treatment should clear up the diagnosis. The physical distinction between gummata and condylomata may in some instances be obscure (Semon).

The main reason why gummata are so infrequently seen, as to have led some observers to an erroneous opinion as to their rarity, is that many patients do not present themselves until after the stages of liquefaction and ulceration have become established. When this stage has not been observed, and the larynx, as is more usual, is not inspected until after ulceration has considerably progressed, the appearances are not always characteristic. They may be confounded with those of lupus, carcinoma, and tuberculosis. The general diathesis, the clinical history, the existence of enlarged submaxillary and post-cervical lymphatic glands, the character of concomitant affections of the skin and mucous membrane, the aspect of the patient, assist in discrimination. Sometimes, too, tuberculous and syphilitic lesions coexist.

The typical tertiary ulcer, sharply defined, and below the surface of the mucous membrane, is more or less circular when recent, more or less crenated when reparation is taking place at one or more points of the circumference, and looking as though cut out with a punch when in œdematous tissues. Its borders are sharp, elevated, but not often undermined, and more or less rounded in their visible outline, and are surrounded by a more or less circumscribed inflammatory areola in the mucous membrane. The bottom feels hard to the probe on palpation. The bed of the ulcer is grayish, or lardaceous, yellow from fatty detritus, and covered with adherent concrete pus, through which, here and there, prominent rosy granulations often project. The surrounding tumefaction is harder and more indurated than in other varieties of ulcer. Purulent accumulations are rather indicative of the syphilitic process. At a later date denuded or necrosed cartilage may be visible in suitably located ulcers.

In cases in which neoplasms have become developed at the seat of existing ulcerations, or of cicatrized ulcerations or erosions, it is often impossible to pronounce as to their nature, even by the test of anti-syphilitic treatment. Not only do such neoplasms exist independently of the syphilitic process, or as the result of irritation provoked by syphilitic process in the vicinity; but when undoubtedly syphilitic in origin, they rarely disappear under specific medication. Tertiary syphilis is usually recognizable in the stages of œdema of the larynx; and almost always in the reparative stages of cicatrization, or in the subsequent stages of stenosis, whether from cicatricial retraction or from organization of effused products.

Prognosis.—Secondary lesions, even when ulcerative, are most frequently curable without cicatrix or without any other sequel. Exulceration of the vocal bands sometimes leaves permanent defect of tissue. The prognosis is good except during temporary conditions of œdema, when it may be grave for the time being. The inflammatory congestion and turgescence is more chronic than in catarrhal inflammations, and are often recurrent. Actual hyperplasia is apt to remain permanent, even after cure of the syphilitic lesion, despite the most assiduous treatment; and when it occupies a

vocal band the voice may be permanently impaired. The singing voice may remain imperfect, although the conversational voice be fully restored; the injured tissues being unequal to the nicety of adjustment requisite for cantation.

In tertiary lesions the prognosis depends mainly on two factors: First, on the impairment of the general health, and the significance of lesions elsewhere, especially in the brain and meninges, and in other important organs. Second, in the extent of ulceration and the character of deformation of stricture which may follow. Temporary gravity exists in the presence of œdema; during the period of exfoliation of necrosed cartilages, and in acute bilateral paralysis of the dilator muscle, the result of exposure to cold or other cause, or to unilateral paralyses when the opposite side is immobile from gumma, or from crico-arytenoid ankylosis (Charazac: *Rev. Mens. de Lar.*, Sept. 1884), any of which conditions may demand prompt tracheotomy to prevent death by suffocation. Ulcerative lesions of the trachea may be fatal by hemorrhage from penetration of large bloodvessels; by pneumonia from access of food through perforation of œsophagus (Berger); or by septic processes due to rupture of the mediastinum. Permanent impairment of the voice is to be expected in all cases in which the vocal bands undergo serious injury, and in many in which permanent changes are likely to take place in other structures contiguous to the glottis.

Glutition is rarely affected, even after complete destruction of the epiglottis; and in exceptional cases difficulty is mainly confined to fluids swallowed without deliberation.

Stricture rapidly supervening upon hyperplasias is often amenable to active treatment, sometimes with striking rapidity (Krishaber: *loc. cit.*); but the more frequent stricture of slow progression can only exceptionally be brought under control.

Serious danger attends even cure of extensive ulcerative lesions in the interior of the larynx, for the resulting stricture, if severe, is likely to necessitate tracheotomy, with great probability of permanent retention of a canula. It is rarely amenable even to excision of cicatricial tissue by external access. Subglottic stricture is much more serious than supraglottic, and tracheal far more serious than laryngeal stricture. Stricture of the trachea, when low down, is practically insusceptible of amelioration; and death by slow apnœa, or by sudden suffocation, is the usual outcome.

When the syphilitic cachexia had advanced so far as to have produced incurable lesions in important viscera or in the cerebrum, death may ensue from these causes despite sustained cure of syphilitic lesions in the larynx. In cases complicated with paralysis of the dilator muscles of the larynx from cerebral lesion, the death may take place by occlusion of the glottis and suffocation, or by encephalitis and coma.

In hereditary syphilis the prognosis is very much the same as in tertiary syphilis; being much worse in infancy and childhood than in more delayed manifestations. The small size of the larynx renders stricture and intercurrent œdema far more significant; and the tendency to spasm of the larynx inherent to all laryngeal affections in childhood presents an additional element of danger. Fatal issues from these three causes are not infrequent. An element of uncertainty as to the final result remains in all varieties of syphilis of the larynx and trachea, due to the fact that permanent liability to recurrence prevails in many instances, despite the best apparent results of the most judicious treatment; and often, too, after prolonged intervals of immunity from any further manifestation of constitutional syphilis.

Treatment.—Fortunately, lesions even of great destructive and menacing tendency are amenable, as a rule, to treatment; often promptly.

The treatment, broadly stated, is that applicable to constitutional syphilis in general; mercury in the early manifestations and iodides in the late ones. In many of the later, if not most, the mixed treatment combining the two specifics is the most serviceable. In congenital syphilis the gray powder is believed to be the most efficacious form of the drug.

While willing to admit that secondary lesions often subside without traces and without much risk of subsequent tertiary manifestations, although mercury be withheld, I deem it the more prudent practice, and, therefore, the best practice, to employ mercury; in the belief that its specific constitutional influence affords the patient better protection as to future manifestations. As to the value of iodides in tertiary syphilis, there is no difference of opinion. Tonics are often indicated. All sources of irritation, exposures, excessive use of the voice, alcohol and tobacco, are to avoided.

Sedative inhalations in vapor or spray are often of great topical benefit in subduing collateral inflammation; and antiseptic inhalations are indicated in gangrenous cases.

Secondary syphilis. Mercury may be administered by the stomach or by the skin. When the lesions are moderately severe or slow in progress, the corrosive chloride may be administered in doses of from one-sixteenth to one-eighth grain, three times a day. The green iodide may be given in doses gradually increased from one-sixth of a grain three times daily to the point of tolerance. The addition of extract of belladonna may cause it to be better borne by the stomach. In individuals in whom serious gastric disturbance is produced before any specific effect has been noted, and in seriously severe cases and cases of rapid progress, inunctions of a drachm of mercurial ointment daily are preferable, or pencillings with solutions of oleate of mercury in oleic acid, ten per cent. Lewin prefers hypodermatic injections of corrosive chloride. Concurrent stomatitis is to be combated by the internal administration of potassium chloride, or the use of a saturated solution of that salt, or of a weak solution of potassium permangante as a mouthwash. It is hardly necessary at the present day to mention that salivation is to be avoided. In my own experience topical medication is, as a rule, superfluous in non-ulcerative secondary syphilis, and often unnecessary in the presence of ulceration. When topical medication seems necessary, inhalations of sprays of corrosive chloride (Demarquay) half an ounce or more daily of a solution containing one grain to four ounces of water are useful locally and constitutionally. In particularly obstinate conditions, especially in the presence of hyperplasias, the topical applications of solutions of iodine and potassium iodide in glycerine (Schnitzler) half a drachm and a drachm respectively to the ounce, made daily or at longer intervals, sometimes accelerates the cure.

In the transitional stage and in the tertiary stages, the mixed treatment has been most beneficial in my own practice; one-sixteenth to one-eighth of a grain of the corrosive chloride, five to ten grains of potassium iodide in half an ounce or more of the compound syrup of sarsaparilla, three times a day. It may sometimes be necessary to increase the dose of the iodide up to the point of tolerance. In such cases the "grain to drop" solution in the most convenient preparotion. The danger of inducing œdema of the larynx by sudden large doses must not be forgotten. When necessary sodium or ammonium iodide may be substituted for the potassium salt, or hydriodic acid may be employed.

In the presence of œdema, hypodermatic injections of corrosive chloride (Lewin), one-thirtieth of a grain, twice a day or two, and after improvement, at intervals of three days or more, have proved quite efficacious. If amelioration is not prompt, and if the patient cannot be carefully watched by an attendant competent to interfere in an emergency, it is best, in my opinion, to perform prophylactic tracheotomy, instead of awaiting its urgent indication. The same rule is applicable to threatning cases of extensive hyperplasia whether from specific or from non-specific infiltrations.

Nevertheless, remarkable happy results, even in urgent cases of these kinds, have frequently followed active treatment by inunction (Krishaber) and by hypodermatic injection (Lewin). Intubation of the larynx from the mouth (O'Dwyer) has been reccommended as applicable in many instances of œdema and constriction heretofore treated by tracheotomy. As yet, I know of no experience with intubation in this special connection.

Ulcerations heal more promptly when the constitutional treatment is seconded by topical cauterizations with fused silver nitrate, or with mercuric nitrate one part to from four to ten of water, or with cupric sulphate in crystal, or saturated solution. Chromic acid, one part in from five to eight of water, has long been extolled (Isambert). Some prefer iodoform (Morgan). On the other hand, extensive ulceration often heals promptly under the influence of constitutional treatment alone.

Vegetations, detached flaps of mucous membrane, and semi-detached fragments of necrosed cartilage call for operative removal with cutting forceps, evulsion forceps or snares, as may be most convenient, when these products are so located as to interfere with freedom of respiration or to threaten such interference. When these manipulations are impracticable, tracheotomy may be requisite. When tracheotomy has been performed under any of the conditions mentioned, the canula is to be removed as soon as it has become apparent that its retention is no longer essential to the safety of the patient. Cicatricial stricture of the larynx may be treated by the introduction of the intubation tube through the natural passages (O'Dwyer). This treatment may be applicable to stricture high up in the trachea. Stricture in the middle portion of the trachea requires low tracheotomy and the introduction of a tube long enough to reach beyond the constriction. Stricture at the bifuraction is hopeless.

Paralyses, even those of the posterior crico-arytenoids, are usually amenable to anti-syphilitic treatment even when of considerable standing. This fact seems to indicate that the atrophy found in necrotic paralysis is not due to simple inaction of the muscle, but rather to trophic impairments of neurotic origin. Electrization may be employed when relief does not ensue from systemic medication.

Membranous webs, occluding the glottis from side to side, are divided by incision or by galvano-electric-cautery, the edges cauterized, and readherence prevented, if possible, by frequent introduction of dilating sounds. These laryngoscopic operations are often rendered futile by insurmountable tendency to recicatrization, whereby the morbid condition is reproduced. Success in cases of this kind would seem to require exposure of the interior of the larynx by external division of the thyroid cartilage, and excision of the whole of the cicatrical tissue (Mackenzie.)*

When syphilitic laryngitis has existed for a long time, such an amount of destruction may have taken place, and such a degree of systemic poisoning, as to render recovery impossible. The constrictions produced by the cicatrices of extensive ulcers, and the adhesions between adjoining surfaces, in cases that recover, are often such as to render tracheotomy necessary, with the permanent use of the tube; for constrictions following syphilis are not, as a rule, amenable to dilatation.

Threatened asphyxia or unconquerable dyspnœa, from gumma, loose cartilage, morbid growth, abscess, or œdema, may necessitate tracheotomy. Tracheotomy for the purpose of conquering dyspnœa due to tumefactions in the larynx is perfectly justifiable, and usually successful. It is likewise justifiable for the mere purpose of securing rest to the organ—much more so, indeed, than in analogous conditions attending tuberculosis.

The treatment for local adhesions consists in relieving the tension as far as possible by laryngoscopic division of the constricting bands of tissue, with knife or with electric cautery, and then cauterizing and recauterizing the adjacent surfaces, to prevent fresh adhesions. These cases require careful watching and prompt attention to overcome the disposition to recurrence, which is very apt to take place in spite of all efforts. When the epiglottis is implicated, much good can be done by teaching the patient to move the organ frequently by means of his forefinger.

In a case of stenosis due to "concentric hyperchondrosis," as a result of the hyperplastic chondro-perichondritis, Prof. Heine performed a successful resection

*Med. Times and Gaz., August 19, 1871, p. 218.

of the anterior portion of the thyroid cartilage, splitting that structure in the middle line, separating the perichondrium and superjacent soft tissues, to the distance of one-half its surface on the two sides, with the elevator, and then removing the denuded portions by longitudinal section with bone forceps. The patient rallied so well from the operation that an artificial vocal apparatus could be substituted for the ordinary canula on the fifth day. He became able to resume work after a while; but the disease made new inroads, and he died, eleven months later, in an advanced stage of tuberculsis.

Despite the most judicious treatment, and the most satisfactory immediate results, recurrence or recrudescence takes place in many instances at variable intervals, requiring resumption of specific treatment. The most satisfactory results claimed by any writer have been in cases actively treated by Lewin with hypodermatic injections. It is advisable to keep patients under observation for many months after active treatment has been discontinued. Mercuric iodide (biniodide) in small doses, one-twentieth to one-tenth of a grain, three times daily, may judiciously be given for prolonged periods during which apparent health exists. Potassium iodide, in diminishing doses, should be administered from time to time for a few days every month until the patient begins to show susceptibility to physiological effects from small doses; and then this susceptibility should be tested from time to time at intervals of a few months. Such supervision for two years at least seems to present the best prospect for riddance from diathesis.

It may be mentioned in conclusion that, under intercurrent attacks of erysipelas, obstinate cases of tertiary syphilis of the larynx and trachea have undergone cure after having resisted all medicinal treatment.

Free Whiskey and the Increase of Idiocy and Insanity.—In Norway, after the removal of the tax on whiskey, insanity increased fifty per cent. and idiocy one hundred and fifty per cent.—*Medical Record.*

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING, SEPTEMBER 26, 1888.

The President, J. Solis-Cohen, M.D., in the chair.

Dr. Samuel W. Gross read the following paper on

THE TREATMENT OF CARCINOMA OF THE BREAST.

Of operations which do not rank with major procedures, not one is more commonly practised by men not skilled in the manual of surgery than that of the removal of the mammary gland for carcinoma. The superficial situation of the organ, the ease with which hemorrhage is controlled, the flaps are united, and the dressings applied, all tend to make partial or complete extirpation of the breast a tempting field for the young surgeon. If to these considerations be added the great frequency of the disease, it will be seen that its treatment should constitute an instructive topic for consideration and discussion by this body.

In accepting your invitation, Mr. President, to make the opening remarks upon the subject, I take it that a brief narration of my own personal experience will prove to be more interesting than were I to deal with the practice of others, the more especially as the operation which I have performed is more thorough than the usual procedure.

At the outset I will state that in the management of so lethal an affection I have relied upon the scalpel, as I believe it to be the one and only measure which is capable of affording good results. It may be that some of my hearers are sceptical as to the propriety of interference. The old tradition that carcinoma is an outward evidence of a blood disorder, and that it cannot, consequently, be cured by operation, may still influence a few of our members. To these I may be permitted to say, first, that the leading minds of the world now admit

that carcinoma is primarily a local growth; and, secondly, as I have elsewhere* conclusively shown, from an impartial examination of a large number of cases that the knife not only prevents the local dissemination of the disease, its extension to the lymphatic glands, and the occurrence of secondary growths in a large percentage of cases, but that it moreover prolongs life, and definitely cures one patient out of every eight and a half.

An operation in a suitable case having been decided upon, the one selected by the majority of surgeons is that with which we are all so familiar, namely, the inclusion of the nipple and a portion of the skin in two elliptical incisions, the reflection of the flaps, and the dissection of the glands from the surrounding tissues. Other surgeons, actuated by the desire to save as much of the gland as possible, limit their efforts to the extirpation of the tumor alone. The first of these procedures is faulty enough; the latter cannot be condemned in too severe terms; and yet, in his recent monograph on "The Operative Surgery of Malignant Disease," Butlin, I am sorry to say, recommends it. A knowledge of the changes which, starting from the tumor itself, ensue in the remainder of the breast, in the adjacent soft tissues, and in the associated lymphatic glands, which changes indicate the local extension of the disease along the lymph paths, ought surely to lead the surgeon to reject such irrational operations. In very exceptional instances a cure may be effected; but we all know what is the common result—a more or less rapid recurrence of the disease—a favorable issue being so uncommon after these incomplete operations that few, if, any, of us have ever witnessed it.

Dissatisfaction with my own earlier results and those which I was enabled to follow in the practice of other surgeons led me, ten years ago, to adopt a radical procedure, the object being to effect riddance of all the tissues in which the experience of hundreds of years demonstrates that recurrence, or a new outbreak of the disease, takes place. Hence, in my operation, which is minutely described in the *American Journal of the Medical Sciences* for April, 1888, I amputate, by a circular cut, the entire breast with its overlying skin and fat, dissect off the pectoral fascia, and carry an incision into the axilla, through which I am enabled to extirpate its contents. If nodules should be found in the pectoral or intercostal muscles, they are also removed with an equally unsparing hand. The edges of the wounds are then approximated, the closure of the breast incision being greatly facilitated by raising the flaps from the subjacent tissues for an inch and a half to two inches, and the employment of button sutures. In some cases, the wound cannot be entirely united, so that it has to heal by the process of granulation.

In the discussion which will follow the reading of my paper, I will doubtless be asked, first, Why do you remove the entire breast and its surrounding tissues? and, secondly, Why do you attack the axilla in all cases? My answer is simply because recurrence, or a new out-break of the disease, ensues in tissues which are left behind in the less radical modes of operating. The accumulated observations of surgeons show that recurrence may be anticipated in the skin and subcutaneous tissues, especially at or near the cicatrice; in the fascia covering the pectoral muscle; in the remnant of the breast from which the tumor alone was excised; in outlying lobules which were overlooked during the performance of the less complete operations, and in the lymphatic glands, particularly those of the axilla.

Answering these questions more fully, I would say that sound pathology, as well as experience, demands that the entire mammary gland along with its circumjacent tissues should be amputated, first, because we have to deal with a carcinomatous degeneration commencing at one point, from which the cells migrate in various directions into the remainder of the breast and the surrounding tissues, the extent of which migration into the lymphatics and their radicles it is impossible to determine with

*American Journal of the Medical Sciences for April, 1888.

the naked eye; secondly, because the disease is sometimes multiple, and the smaller growths are only detected on examining the breast after its removal; thirdly, because minute lobules frequently lie at some distance from the main body of the gland, particularly toward the axilla and the clavicle, which may subsequently become the seat of a new outbreak, even as late as ten years, as in a remarkable instance recorded by Banks; and fourthly, because nodules may be found in the subcutaneous tissues at a relatively great distance from the breast, which would certainly have escaped detection in the lesser operations.

My answer to the second question, Why do you attack the axilla in every case? is because the axillary glands are almost always diseased, even though they cannot be felt prior to operation. Of my 45 cases, the glands were not palpable in 18, but in 15 of these they were present when the axillary space was opened. In 57 out of 65 similar cases, Kuester found that the glands were infected, so that our combined experience demonstrates that the glands are invaded in 86 out of every 100 cases in which there is no external evidence of their implication. Hence, if the axilla be not evacuated of its contents in every case, a subsequent operation will almost surely be demanded. In point of fact, I consider this step as the keynote of the procedure, and I refuse to operate if I am not permitted to have my own way in this regard.

Although the procedure which I have described may appear to be unnecessarily severe as to the sacrifice to tissue, and, at first sight, seem to be attended with more risk than operations performed with a more sparing hand, I have still to present some facts which conclusively show that it is the best that has as yet been practised as regards mortality, freedom from local recurrence, and a final cure.

Of my 45 cases, 2, or 4.44 per cent., perished from the operation, and 5 patients were lost sight of after recovery. Deducting the 7 that died and could not be traced, 38 cases show local recurrence in 11, or 28.95 per cent. Including the deaths, out of 40 cases, 9, or 22.5 per cent., recovered. Of these, 1 died of an intercurrent disease in 7 years and 10 months, while the remainder are still doing well, 1 for 9 years and 10 months, 1 for 9 years and 1 month, 1 for 6 years and 9 months, 1 for 4 years and 3 months, 1 for 3 years and 11 months, 2 for 3 years and 6 months, and 1 for 3 years and 5 days.

Let us contrast these results with those afforded by the next best operation, namely, the removal of the breast by flaps and the evacuation of the contents of the axilla in every case. Of 328 cases of this description in the hands of Banks, Kuester, and von Bergmann, 10.67 per cent. perished, there was local recurrence in 54.92 per cent., and 15.15 per cent. were cured, so that my operation is safer by 6.23 per cent., is less liable to local recurrence by 25.97 per cent., and affords 7.35 per cent. more of permanent recoveries.

It is quite certain that the greater immunity from local reproduction of the disease in my operation is due to the total amputation of the breast, its skin, and enveloping fat. Despite the fact that my results are better than any that have heretofore been recorded, a careful examination of the cases of Banks shows that he met with only 3.88 per cent. more of recurrences than I have, and that his percentage of recoveries, namely, 20.77, is only 1.73 per cent. less than my own. Hence, I felt that I might possibly have sacrificed too much of the skin; and, since June, 1887, I have so far modified my operation in 10 cases, the skin in none being apparently affected, as to save enough of that structure to admit of nice approximation of the edges of the wound. All recovered from the operation; one died from recurrence in the axilla and metastasis, one is living with axillary reproduction; in not one has there been local reproduction; one patient is free from disease at the end of fifteen months; one for one year; one for nine months; and the remainder for periods varying between three and eight months. These cases can be followed and whenever I am sure of being able to trace my patients, I shall give this pro-

cedure a fair trial. When, on the other hand,the patient lives at a great distance, or her circumstances are such as to prevent her visiting me in the event of recurrence, I will adhere to the more extensive operation.

DISCUSSION.

Dr. James Collins: I have on two or three occasions, in the case of small tumors in comparatively young women, allowed myself to be overruled by the patient and her friends, who urged that it would be a pity to sacrifice so much of the breast as I proposed, to performing a restricted operation; but I have regretted it in every instance, and I can assure Prof. Gross that I will never offend again. That which Dr. Gross describes as the "second-best operation," the large elliptical incision with thorough removal of tissues beneath the skin and exploration of the axilla is the one I have practised in the majority of my cases. The prolongation of life in those I have been able to follow would average not quite three years.

The great difficulty we have to contend with in mammary tumors is to secure consent to an early operation. Patients go from surgeon to surgeon, and from city to city, and finally yield consent as a last resort or in deference to an authoritative opinion; usually too late to escape recurrence. The recurrence which then takes place, despite skilful operation by a distinguished hand, will be cited in discouragement of timely operation in other cases, by a large circle of relatives and friends.

The exploration of the axilla, which the lecturer in his masterly demonstration has so justly emphasized, should never be omitted. Nor is it too trite a remark to recall that antiseptic methods, which have so improved the results of extended operations, should here also remove any lingering dread of opening up large spaces; for they improved the outlook of the procedure by assisting the rapidity of healing, and excluding the danger of septic accidents and sequelæ.

Dr. O. H. Allis: I have nothing to add in discussion; I have repeatedly seen Prof. Gross operate, and there is one point in his method of operation to which I would call special attention. The breast having been covered for twenty-fours hours with antiseptic solutions and his hands being thoroughly aseptic, he carefully palpates the pectoral region for outlying nodules, marking the site of any that he finds with a pencil-stroke, and when he operates he does not dissect out these places but includes them well within the sweep of the line of incision. In other words, he cuts beyond the outer limits of the disease.

Dr. John B. Roberts: Dr. Gross has for many years taught us all the proper way to remove a breast, that is, to remove it thoroughly. In my own operations, I have whenever possible, employed the large epileptical incision; the advantage, and I confess the only one, being that when approximation of the edges of the wound is at all possible, it can by this method be more readily effected. No one who has learned from Prof. Gross the proper way to open the axilla would dare to neglect this portion of the operation. As to aseptic and antiseptic methods, there can be no difference of opinion among experienced operators; they are the only methods permissible in operative surgery. I would like to ask Dr. Gross how long it takes to repair one of the large spaces in what he calls the dinner plate incision, and what his opinion would be as to the prospects of a plastic operation to aid in hastening healing.

Dr. R. Bruce Burns: Of all surgical cases these are the most unsatisfactory. In my earliest operations I did not open the axilla. Three cases operated on in this way are living for eleven, nine and five years respectively. Of later years I have opened the axilla, and have been unfortunate. Recurrence has taken place in the cicatrices and even in the axillary tissues, perhaps in small glands not removed. I have thought, perhaps, it recurred in the adipose tissues. I have usually employed the elliptical incision. The method of leaving a large open wound to heal by granulation is rather

hazardous. In all cases where I have had to depend upon extensive granulation there has been rapid recurrence and metastasis. There may also be limitation of the movements of the arm from matting of the tissues. It is wise always to attempt to secure union by first intention. It would be well to attempt to remove outlying nodules in the surrounding tissues. Where nodules occupy a portion of the gland (mammary) and are intimately attached to it, the whole organ should be removed.

Antiseptic measures are only so far useful as, in arranging them, you secure aseptic conditions. I believe thorough cleanliness in all respects, as to instruments, dressings, and the surgeon's hands, with good drainage, is all that is necessary in the treatment of the wounds of operations.

Dr. Gross, in closing the discussion, said: There are many points which might have been touched upon in the paper which I omitted for the sake of brevity. Societies do not like to listen to long papers, and the best speakers teach little in long papers. The points I have tried to emphasize are, the importance of a thorough operation, and the fact that its results are better than those of incomplete operations.

Now as to primary union. Of course, I want to get primary union whenever I can. Those who have never seen my operation would be surprised to see how close an approximation we can get by sliding the bistoury under the skin, say for from one to two inches, and then drawing the loosened flaps together with button sutures.

Sometimes when there has been very extensive disease, necessitating correspondingly extensive operation, we have a gap left to granulate of two or three finger's breadth—never more than three fingers breadth. Healing may be slow in a debilitated subject with a large wound, but averages about six weeks.

Now as to saving the breast and only removing the tumor itself—I do not care for the breast. It is of no use. I am concerned in getting rid of all diseased tissue. What surgeons would undertake to remove a sarcoma of the thigh for example, and for the sake of leaving a little more stump, make his flaps through infiltrated tissue? I should consider such a procedure criminal. Yet it is just what some surgeons want us to do in the breast.

In my last ten cases I did for reasons stated in the paper, the lesser operation and if I find it equally satisfactory in the end, I will adopt it altogether. I am not wedded to one operation, only so far as not only personal experience but the combined statistics of several operators with good results show that my operation has given the best results.

Dr. Burns has had an experience of coincidences. In the cases in which he did not open the axilla and recovery took place, he had a free axilla. I judge that the doctor thinks recurrence takes place in granulations. Now it is a histological fact that granulation tissue will give rise to granulation tissue alone, and not to epithelial tissue. The granulating surface may be great or small; that has nothing at all to do with recurrence. In those other cases all the disease was not removed, and, hence development again took place in the tissues forming the bond of union, or the tissues near the cicatrice.

As to aseptic surgery, I can only say that if anyone has been taught the modern methods and neglects them, and death occurs from erysipelas, pyæmia or septic complication, he cannot be held irresponsible.

For Chronic Pharyngeal Catarrh.—Beehag (*British Med. Journal* Sept. 29, 1888) recommends the dry insufflation into the naso-pharynx of the following powder:

℞.	Monthal (in fine powder)	℥ss
	Ammon. Chlorid.	ʒ jss
	Pulv. acid boric.	ʒ j
M.		

Pinches of this may be taken frequently into the nose in the form of snuff, and drawn back into the throat, this method being especially indicated when there is atrophia rhinitis (ozœna) also present.

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BALTIMORE, OCTOBER 13, 1888.

Editorial.

SULFANOL.—Hypnotics that are effective and yet harmless as to their after effects are indeed rare. Many appear in the literature are tested, vaunted, used for a short time and then disappointment and failure pushes them aside to make room for new ones. Now sulfanol has been receiving the attention of the medical world and it is recommended principally because it is said to do the work which it pretends to do, and is without the unpleasant ill effect which follow so many hypnotics. Dr. B. Sachs (*Medical Record*, Oct. 6, 1888) has published exceedingly pleasing results and if other practitioners succeed in obtaining like effects sulfanol will soon occupy an important place in the drug list. We can only judge of a new remedy when the first flush of enthusiasm has paled. Sulfanol is as yet too much discussed and too new to have a decided place. Sachs gave, as a rule, 2.0 (30 grains) one-half hour before bed time and his experience was limited to sixty trials with fifteen patients, who had a variety of troubles but principally what he calls "functional insomnia." In reviewing the history of these cases he draws the following conclusions:

1. These cases prove that sulfanol is valuable in cases of functional (neurasthenic) insomnia. In those cases in which insomnia is often the most distressing symptom, it appears to justify the claim of its discoverer that it restores the natural desire for sleep, two grammes being sufficient to bring about this result.

2. It is easily tolerated by the stomach; does not produce headache, except in large doses of 3.0 (45 grains) and more; has no effect upon the circulation, and can be given in cases of irritable and fatty heart, and apparently in cases of fever, in all of which respects it appears to be superior to other hypnotics.

3. It has very slight or no narcotic virtues.

4. With some patients the drug appears to lose its effect if frequently administered.

If a large experience will prove sulfanol to be a safe hypnotic in fever cases all medical menwill recognize it as a great boom. In the treatment of insomnia accompanying mental troubles its success is assured; in the treatment of neurasthenic insomnia it promises very well indeed, and the treatment of this trouble can be inaugurated by the exhibition of this drug; but if the condition is to be permanently cured we are in need, not of additional hynotics, but of more effective means of regulating cerebral circulation.

SHORTHAND AND THE PHYSICIAN.—In reading an article in the *Boston Medical and Surgical Journal* of October 4th, 1888, on "Shorthand as an aid to Scientific Study," it brings to mind the fact that at a meeting of stenographers held last year in London, England, there was only one medical man present. An exact knowledge of shorthand is a rare accomplishment and one could scarcely imagine that a medical man, either as a student or physician, would have the time to study or the opportunity to perfect himself in that art which requires so much hand work for perfection. In the study of stenography, a writer may be ever so skilful in one department,

such as law, and yet be wholly unable to report a medical speech. Now, although we are increasing the number of our medical societies, associations, congresses, etc., and also the times of their meeting, and although it might seem as if a medical stenographer would find ready work to take down and transcribe the numerous speeches and discussions, yet such is not always the case. It must be remembered that those speeches and discussions are intended for busy men to read and the less padding and the more facts they contain the more acceptable they will be. Occasionally we wish to preserve the classical speech of some great man but usually abstracts are sufficiently satisfactory. As was recently stated in these columns, the verbatim report of a lecture is of very little use to a student. What he wishes is an abstract with the leading facts. A medical stenographer in this city would find little occupation.

The Medical Societies.—Now that the Medical Societies of the city are again taking up their winter work, it is a matter for the respective members to decide what the character of this work shall be. There are some men who attend the societies from the beginning and are good and active workers, while others only occasionally visit the meetings and never or rarely contribute. If every member of each society would make one contribution during the year, the amount of work done would be surprising. A paper need not contain the relation of an unusual case or of a rare operation. Ordinary cases and the most common and dangerous diseases need to be discussed. From the latter much more is learned. Again a paper or remark which may seem commonplace or trite to the speaker, are just the ones to draw forth a lively and instructive discussion. Short papers, on subjects in general medicine, are especially needed and what the majority of members always welcome. Let every man, therefore, endeavor to do his duty at his society at least by his presence and when possible a few remarks to the point would be a graceful addition.

The Therapeutical Value of Lipanin as a Substitute for Cod Liver Oil.—Cod Liver Oil is so unpleasant to take that almost all patients, and especially children, object strongly to it under any circumstances. The great difficulty of finding a more palatable substitute has given it its firm place in the materia medica for so many years. How it does good is, perhaps, not easy to explain. It might be on account of the iodine contained in it, but that is present in such small quantities.

Some supposed that it contained the bile acids thus assisting osmosis and absorption of the fat, but investigation proved this false. It contains no bile acids but its therapeutical value evidently depends on the fat contained and on nothing else. Dr. S. Hauser (*Zeitschrift f. Kl. Med. Bd. XIV H.* 5 & 6) after having tried as a substitute for cod liver oil various kind of oils and fats, tested the substance which Prof. v. Mehring called Lipanin. This consist in part of olive oil and is dispensed by a Berlin firm. In week alkaline solutions it forms a pure and lasting emulsion.

At the suggestion of his *chef* Prof. Kohts, of Strassburg, Hauser used lipanin in a large number of patients, children and adults, and compared the results with cod liver oil. He gave a teaspoonful of lipanin after each meal and carefully noted its effect on appetite, digestion, etc., as he had previously done with cod liver oil. He found that in contrast to cod liver oil lipanin was easily taking and even liked by some of the children. It did not interfere with the appetite, could be taken in the warmest weather and an examination of the feces showed that the fat was much more completely absorbed than in the case of cod liver oil.

Miscellany.

The Value of Inhalations in the Treatment of Lung Diseases.—Dr. C. Theodore Williams in discussing the above subject (*British Med. Journal*, Sept. 29, 1888) before the British Medi-

cal Association, as to their efficacy gives the following principal methods of inhalation:

1. Inhalation of gases, such as oxygen, nitrous oxide, atmospheric air (condensed or rarefied), or vapours of certain medicines, volatile at low temperatures, as ether, chloroform, nitrite of amyl, and iodide of ethyl.
2. Moist warm inhalations.
3. Dry fuming inhalations.
4. Atomised sprays.
5. Respirators containing medicinal agents, by which the air is impregnated previous to respiration.

And then gives as his conclusion:

1. That the success of inhalations as a mode of medication depends principally on the easy convertibility into gas or vapour of such substances as are clearly desirable for the purpose.

2. That, consequently, bodies which are volatilised at ordinary temperatures are more readily absorbed by the lungs than bodies which have to undergo combustion before conversion into gases.

3. That all moist inhalations, where steam, watery vapour, or spray is the vehicle of medication, are but slowly absorbed by the lungs, and enter the circulation in small quantities, and, in some cases, not at all, the slow rate of pulmonary absorption contrasting strongly with the rapidity of gastric absorption of the same medicines when swallowed, as proved by their detection in the urine.

4. That medicinal inhalations are more useful in diseased conditions of the pharynx, larynx, and larger bronchi than in those of the alveoli and lung parenchyma.

5. That in pulmonary disease the antiseptic respirators, while they lessen cough and reduce expectoration, exercise no lasting remedial influence on the diseased conditions of the lungs, and often seriously interfere with the freedom of respiratory effect, which is so desirable in the treatment of such affections.

Medical Society of Virginia.—The Nineteenth Annual Session of the Medical Society of Virginia, will convene at 8 P.M., Tuesday, October 23, 1888, in Norfolk, Va. Dr. Herbert M. Nash, of Norfolk, Va., will deliver the *Address of Welcome.* Dr. Wm. T. Walker, of Lynchburg, Va., will deliver the *Annual Address to the Public and Profession.* Subject, "Moses and other Doctors." Dr. Benjamin Blackford, of Lynchburg, Va., will deliver the *President's Address.* Subject, "The Progress of Medical Education, and the Importance of the Study of the Physical Sciences in relation thereto during School Life."

The Society will nominate to the Governor of Virginia for appointment, as members of the Medical Examining Board of Virginia, for the term of four years, beginning January 1, 1889, thirty-two regular practitioners of Medicine in Virginia, as follows: Two from the State at large, and three from each of the ten Congressional Districts of the State.

The night session will begin about 7:30 o'clock with the call for reports on advances in the several departments of the medical sciences. The following order will be observed until adjournment to Thursday morning when the call will be continued until this order is complete—no paper to exceed thirty minutes in reading:

Advances in Anatomy and Physiology,

Anvances in Chemistry, Pharmacy, Materia Medica and Therapeutics.—In this Section the following paper will be presented: "The Carbon Compounds—Their True Place in the Treatment of Fevers; or the Particular Forms of Fever in which They are Indicated," Dr. S. K. Jackson, of Norfolk, Va.

Advances in Obstetrics and Diseases of Women and Children.—In this Section the following paper will be presented: "Conduct of Enceinte Women before and after Confinement," Dr. Wm. L. Robinson, of Danville, Va.

Advances in Practice of Medicine.—In this Section the following papers will be presented: "The Uric Acid Diathesis," Dr. J. Spotswood Wellford, of Richmond, Va. "The Development of Medicine," Dr. M. A. Rust, of Richmond, Va. "The Duty of the Doctor to his Patient Suffering under Malignant Disease," Dr. William W. Parker, of

Richmond, Va. "Thirty-two Years' Experience as a Country Practitioner," Dr. Charles R. Cullen, of Richmond, Va.

Advances in Surgery.—In this Section the following papers will be presented: "Exploration of the Bladder for Obscure Diseases of that Viscus," Dr. Hunter McGuire, of Richmond, Va.—By invited guest, Dr. Milton Josiah Roberts, of New York, N. Y.

Advances in Ophthalmology, Otology and Laryngology.—In this Section the following paper will be presented: "Enlarged Tonsils—What Shall we do With them?" Dr. Charles M. Shields, of Richmond, Va. "Improved Means of Diagnosis in Throat and Nasal Troubles, with Remarks on Treatment," Dr. Joseph A. White, of Richmond, Va.

Advances in Hygiene and Public Health.

Advances in Psychology and Neurology.

In addition to the above reports, by resolution adopted at the last annual session, Drs. Wm. W. Parker, of Richmond, Va., Wm. P. McGuire, of Winchester, Va., and T. M. Bowyer, of Liberty, Va., were appointed a Committee to "Report a Record of all Deaths Known to have Occurred during the Past Five Years in this State from the Administration of Chloroform."

When this order shall have been completed, call will next be made for voluntary scientific papers, contributions and reports—titles of which have not been received in time to be assigned to any special department. All papers should be ready for immediate delivery to the Recording Secretary at the time of their presentation to the Society.

Dr. Landon B. Edwards will propose the following amendment to Section 1, Article I, of the Constitution of the Society, relating to eligibility to Fellowship, etc.: After the word "surgery"—the last word of the Section—insert, "or who has not received, in due form, the certificate of having passed a satisfactory examination before the Medical Examining Board of Virginia.

The Profession of Norfolk and Portsmouth have arranged for suitable entertainment of their guests which will be named during the session of the Society. Dr. Alex. Tunstall, of Norfolk, Va., is the Chairman of the Local Committee of Arrangements for this session.

Fraternal delegates from any of the recognized regular medical societies of the country will be recognized upon presectation of their certificates of appointment as such, and will enjoy all the privileges of the Session allowed to non-resident Honorary Fellows and invited guests. It is desired that they shall participate in the scientific proceedings of the session, either by reading papers or entering into the discussions upon papers read, cases reported, etc.

Obituary.

THE LATE PROFESSOR JOHN S. LYNCH.

The death of Prof. John S. Lynch, which occurred in this city last week, has removed from our midst one of our most forcible and original medical teachers.

Prof. Lynch was a man of decided individuality and as a teacher exercised a remarkable influence upon the student. He has left his impress upon the medical practice of this city. He was no skeptic in regard to the value of drugs; in fact, he seemed at times to rely too much upon medicines.

To no one more than to him is due the merit of bringing to the notice of the profession here the value of veratrum viride and antipyrine. His latest contribution to practical medicine was a paper on the treatment of diphtheria, read at the Clinical Society last spring, which brought the largest attendance and most interesting discussion of the year. He had the faculty of stating his views in a peculiarly forcible and clear manner, and his ready speech, earnestness, and logical method made him a formidable antagonist in debate.

Prof. Lynch's death is a loss to the profession of this city, and especially to the school with which he was so long connected that it will be difficult to fill.

Medical Items.

The daily papers report a large number of cases of typhoid fever in Woodberry.

Professor Charcot's fee for treating the Emperor of Brazil was $8.000.

The Woman's Hospital opened October 1st. 1888. It is always closed during July and August.

Biedermann, of Prague, will succeed Pryer at the University of Jena.

The first Siberian University has been opened at Tomsk.

The University of Zurich has decided against the admission of women to the lectures.

The British Medical Association has twelve thousand members, and a balance sheet in its favor of over $156.000.

Mr. Tait claims that the uterine appendages have as little to do with the sexual appetite of a woman as her front teeth.

The election of Prof. Gerhardt as Rector of the University of Berlin for 1888-9, has been confirmed by the Emperor.

The New York State Medical Association held its fifth annual meeting at the Hotel Brunswick, in New York, October 9, and 10.

The Faculty of Physic, University of Maryland, at their last meeting elected Dr. John N. Mackenzie, Clinical Professor of Diseases of the Throat and Nose, to fill the place of Dr. Frank Donaldson who resigned.

A. L. Hummel, of Philadelphia, has just issued the first number of the University Medical Magazine. From the staff of editors and contributors, the magazine seems full of promise. It is doubtful if it fills a long felt want.

At a meeting of the Gynecological and Obstetrical Society held Friday, October 9th, 1888, the following officers were elected: *President*, Dr. Thos. Opie; *1st Vice-President*, Dr. T. A. Ashby; *2d Vice-President*, Dr. B. B. Browne; *Secretary*, Dr. C. O'Donovan, Jr.; *Treasurer*, Dr. Robert T. Wilson.

Messrs. R. L. Polk & Co., publishers of the City Directory and also of the Medical and Surgical Directory of the United States, have just issued a Medical Directory for Baltimore, Washington, Maryland and the district of Columbia. It is a book indispensable to physicians.

The meeting of the Southern Surgical and Gynecological Association was not held in Birmingham on the 11th, 12th, and 13th, of September, as announced, but has been postponed till the first Tuesday in December, owing to to the quarantine against yellow fever.—*Medical News.*

Clinico-Pathological Society, of Washington, D. C.—The officers of the Clinico-Pathological Society of Washington, D.C., which was organized in the early part of last winter, are as follows: President, G. W. Johnston, M.D.; 1st Vice-President, H. L. E. Johnson, M.D.; 2d Vice-President, H. B. Deale, M.D.; Treasurer, C. W. Richardson, M.D.; Secretary, D. K. Shute, M.D.

The Englishmen who were present at these meetings gave me personally pleasure. They were every-where, always interested, always ready to say they were interested, and always ready to add their own opinions and experience to any discussion when called upon to do so. They were noble specimens of our race and our profession,—picked specimens I ought to say.—*Washington Correspondent, Boston Medical and Surgical Journal.*

At the meeting of the Clinical Society of Maryland, held Friday, October 5th, 1888, the following officers were elected: *President*, Dr. George H. Rohé; *Vice-President*, Dr. William Green; *Recording Secretary*, Dr. William J. Jones; *Corresponding Secretary*, Dr. Robert L. Randolph; *Treasurer*, Dr. James M. Craighill; *Finance Committee*, Dr. N. G. Keirle, Dr. L. McL. Tiffany, Dr. Robert W. Johnson; *Executive Committee*, Dr. Hiram Woods, Dr. George J. Preston, Dr. William P. Chunn.

The New York Academy of Medicine is forty years old, and has nearly five hundred members. It has a library of 37,000 volumes and 20,000 pamphlets, and a free reading-room, with nearly all the medical journals of the world. It owns its present building and some $100,000 worth of property besides. A new fire-proof building is greatly needed, and an appeal is made to the public for the means to erect one at a cost of $256,000.—*New York Medical Register.*

Dr. William Osler, professor of clinical medicine in the University of Pennsylvania, has been appointed physician to the Johns Hopkins Hospital, and professor of principles and practice of medicine in the Johns Hopkins University. He has accepted the position, and will enter upon his duties in May, 1889.

Dr. Wm. Osler is not quite forty years of age, and has attained distinction in Europe and in this country as a physician, pathologist and physiologist. He was born in Canada, and received his academic and professional training in Toronto and Montreal, obtaining the degree of M.D. in McGill University, Montreal, in 1872. He subsequently studied in London, Berlin and Vienna. During a period of ten yeais, from 1874 to 1884, he was professor of the Institutes of Medicine in Montreal, and he was then called to the University of Pennsylvania, where he has held the chair of clinical medicine. He was appointed in 1885, Gulstonian lecturer in the Royal College of Physicians, London, and in 1886 Cartwright lecturer in the College of Physicians and Surgeons, New York. He is the author of many valuable contributions to medicine.

Original Articles.

THE DIAGNOSTIC SIGNIFICANCE OF THE MITRAL PRESYSTOLIC MURMUR.*

BY FRANK DONALDSON, M.D.

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The characteristics of the typical mitral presystolic murmur are well known and ought to be easily recognized. It is a loud, long sound, rough and vibrating in quality, commonly with a well-marked thrill. It is audible over a fixed and limited position—the mitral area—a circle of about an inch around the point where the apex touches the thoracic wall; the direction of the sound being towards the apex. Its maximal intensity is to the right of the apex, beyond where the blood current enters the ventricles. It may be heard indistinctly above the third rib and very exceptionally in other directions. Its ryhthm is at the end of the long pause, immediately preceding and abruptly ending at and with the first sound. The rhythm of the presystolic murmur when the pulsations are slow is easily recognized by feeling the carotid pulse while auscultating, because the pause before the first sound is much longer than that which follows it. But when the beats are rapid this distinction cannot be drawn for the increased pace is gained at the expense of the period of rest and one pause may be as short as the other. (Fagge) The designation presystolic is sufficiently appropriate since the murmur immediately precedes the ventricular systole.—These important facts show that it is found during the diastole of the ventricle. The closure of the sigmoid valves, the filling of the ventricles and the contraction of the auricles take place during this period of the heart's revolution. With the murmur we often hear pronounced accentuation of the first sound at the apex, and of the second sound over the pulmonary artery, and also when it has existed for some time, a reduplication of the second sound.

*Read before the Association of American Physicians, Sept. 18, 1888.

The blood in the lesser circulation rushes on through the distribution of the pulmonary arteries into the elastic pulmonary veins, then directly onward through the auricle into the ventricle, continuing its flow until the ventricle as well as the auricle is nearly full, when suddenly the auricle contracts on its contents and completes the distension of the ventricle previous to its systole.

Ludwig and Hess showed that the mechanism of the closure of the left auricular-ventricular orifice does not reside in the valve alone; the surrounding muscles of the ventricle have an active share not merely in floating up the valve curtains but in reducing the size of the aperture which these valves have to close. The papillary muscles keep the curtains tight during the contraction of the ventricle. The whole action of the heart is screw-like, six or seven distinct layers of muscular fibres crossing one another. The base muscles do their share of the work of closure, and the valves promptly complete it. When the muscles of the base are enfeebled the valve curtains are insufficient to close the orifice. (MacAlister)

It is a mistake to suppose that the presystolic murmur is always the same. Usually it is the most prolonged of cardiac bruits. It may be very short, so short indeed as to be with difficulty separable from the natural first sound. Occasionally it appears like a tone or accentuation of the first sound. In this case the first sound is so sharp and clear that it may easily be mistaken for the second sound, which becomes inaudible at the heart's apex. Unless careful attention be paid to its rhythm there is danger that the murmur may be mistaken for the normal sound instead of an abbreviated presystolic bruit.

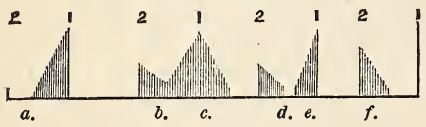
It is a very variable sound both as to its length, its loudness and its quality. It is heard at some times and not at others. It may, and, indeed often does, follow immediately the second sound and continues up to the culmination of the first sound with which it suddenly ceases. It is generally more intense at the ending than at the beginning. Traube says, that if by digitalis the

action of the heart be retarded this murmur ends before the first sound. Flint states that only in one of his cases did the murmur cease before reaching the first sound. It often commences in the middle of the diastole with the auricular systole and runs up to the first sound. Again, it lessens in volume at the middle, and, rising, ascends to its first intensity.

It sometimes becomes altogether inaudible in the middle of the long pause and then reappears. In some cases there is an entire absence of a murmur, but instead, we hear an accentuated clicking first sound.

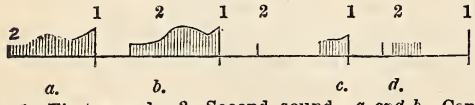
The name of post-diastolic is given very inappropriately to the murmur heard immediately following the closure of the sigmoid valves. This sound, though rough, is not blubbering and vibrating. It is generally indicative of pronounced stenosis. The diastole of the ventricle begins with the closure of the sigmoid valves. A bruit that immediately follows the second sound which it is admitted, is found at this precise period of the cardiac rhythm, ought to be designated diastolic without the prefix of "post,"—these two murmurs, the presystolic and the post-diastolic, may be present independently of one another, or they may be separated by an appreciable interval.

FIGURE 1.



1. First sound. 2. Second sound. *a.*—Presystolic (typical) murmur. *b.*—Presystolic murmur united with post diastolic. *c.*—Systolic mitral insufficiency. *d.*—Post-diastolic separated from presystolic. *e.*—Presystolic. *f.*—Post-diastolic.

FIGURE 2.



1. First sound. 2. Second sound. *a and b.*—Containing post-diastolic and presystolic murmurs. *c and d.*—Irregular presystolic.

Although much has been written of late about the presystolic murmur, yet all who have had much experience in consultations in cardiac cases, will confirm the statement of Broadbent, that it is not infrequently, even now, entirely overlooked and often mistaken for the mitral systolic murmur, the differential diagnosis, of which has been clearly established. Formerly, it was supposed that the presystolic murmur was rarely found, but closer observation has shown that it is of frequent occurrence, especially among women and children. Flint observed it in 16 out of 39 cases of mitral disease. Its grave prognostic significance alone justifies the attention that has been given to it.

In this paper we shall only detain the Association by a brief study of the factors entering into the production of this interesting murmur, when of organic origin.

There must be two factors in the production of "fluid veins," whether they are obstructive or regurgitant — the lesion, and the propelling force, together with the other well known influences modifying blood pressue. For the generation of sonorous fluid veins we must have the passage of a jet of blood forced through a narrow constriction into a wider cavity or part of a vessel.

It is acknowledged that mitral stenosis is the lesion in a very large majority of cases, where a presystolic murmur is heard. Many prominent authorities believe that this lesion is invariable. The constriction is frequently found at post-mortems where there has has been no presystolic detected during life. The mitral valves and the auricular-ventricular orifice are specially liable in early life to valvulitis from acute or sub acute rheumatism and other causes, such as scarlet fever, measles, or chorea. These leave formations of connective tissue which narrow the orifice itself in the annular form, or by diaphragmatic partitions with button-hole orifices, or the leaflets adhere together and produce funnel shaped constrictions. In some instances the valves lose completely their natural formation. These new conditions are most favorable to the production of murmurs, which are due to oscillations in the blood itself. The current of blood passes through a small opening into a wider cavity and

is divided up into a number of jets, forming fluid veins. The rapidity and force of the current must cause variations in the intensity of the sounds. The obstructive lesion of the mitral orifice, it must be borne in mind, is of very gradual formation, of months or of years. It commences often insidiously. The auricular-ventricular orifice is so large that it can bear some lessening of its size without seriously interrupting the proper filling of the left ventricle. Thus the stenosis may be sufficient to produce the vibratory sonorous murmur, without any marked subjective symptoms.

While admitting that stenosis of the mitral orifice is, in a very large proportion of cases, the pathological lesion met with where this murmur is found, yet there are numerous cases reported where the mitral orifices were not altered in size, but where other obstructive and narrowing conditions were found inside the ventricle—such as, shortened chordæ tendinæ, thickening and rugosities about the leaflets of the valves or in the walls of the ventricle, to account for the production of the characteristic prolonged, blubbering, presystolic murmur. Wherever and whenever we find physical conditions to produce "fluid veins" with vibratory phenomena, we can have the same sound. We need not recall Flint's three cases where aortic insufficiency, as demonstrated at post-mortems, produced functional murmurs with the characteristics of the mitral presystolic murmur. Dr. Bramwell has published such a case and Dr. Guitéras reported three. Sansom speaks also of cases somewhat similar to Flint's. Osler has had a well marked instance. The writer has never clinically met with such a case, but he has heard aortic diastolic murmurs where there was marked accentuation and shortening of the first sound similar to the effects met with in cases of mitral stenosis. While it is true that such cases have been reported by the most competent auscultators they are in fact but rarely met with. There is, however, no *a priori* reason why they could not exist. Aortic regurgitation murmurs are diastolic in time and if, as Flint claims, the leaflets of the mitral divide the reflow current in the same manner as in the production of the murmur at the auricular-ventricular orifice the sounds may be formed and a prolonged murmur of presystolic rhythm, with the blubbering vibrations, may be heard. Dr. Guitéras maintains that this functional presystolic mitral murmur is more frequently heard than Dr Flint supposed. Balfour, Nixon, Sansom, and others think differently. There can be no doubt but that the diastolic aortic murmur can be conducted to the apex by the solid walls of the hypertrophied ventricle, the current of blood itself, as well as by the sternum and walls of the chest. The infrequency of these functional mitral murmurs, when there is aortic insufficiency, it is difficult to explain. Dr. Balthazar Foster suggests an explanation of how this murmur is heard best at the apex—that different valves are affected in different cases, and that if the left sigmoid near the mitral is affected the blood falls directly back into the ventricle and the bruit is heard best at the apex, whereas if the right or posterior sigmoid valve is diseased, the regurgitant blood impinges on the septima and the bruit is carried down the right side of the heart. Dr. Guitéras maintains that these propagated murmurs are, in fact, mitral obstructive murmurs and that they are more apt to delevop when the posterior aortic segment is affected because in such cases the recurrent stream is brought directly against the anterior leaflet of the mitral valve. Dr. Bramwell (Diseases of the heart) refers to a case of rupture of the posterior coronary segment of the aortic valves, in which no presystolic murmur was audible. There must be some unusual physical condition which has not yet been appreciated.

There is also a murmur which Barlow, Flint, Leaming and Donaldson have designated as intra-ventricular which, when there is much hypertrophy of the left ventricle, seems to occupy the first portion of the systole. This murmur resembles the presystolic, and, when the heart is beating rapidly, may be confounded with it. Of course in diagnosing mitral stenosis everything is taken into consideration together with the murmur.

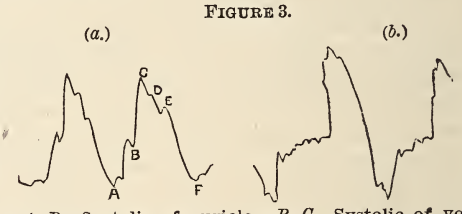
Let us inquire, from what sources the necessary force of the blood current is derived. Dr. Gairdner taught that it is produced by the systole of the left auricle and he accordingly named the adventitious sound the "auriculo-ventricular murmur." This could not possibly apply to the sound which exists before the contraction of the auricle which in health occupies one-fifth of a second of time,and immediately preceds the systole of the ventricle. The feeble force of the auricle in health was shown by Chauveau, who, by prolonged irritation, exhausted its contractility and found that the ventricle continued to act effectively and kept up the circulation. Ludwig confirmed this result by introducing a tube through the auricle. In fact the auricle may be regarded as the dilated termination of the pulmonary veins, acting as a reservoir to supply the ventricle and to regulate the blood-pressure in it. The auricular cavities are never completely obliterated during contraction, though this does not appear to be the case with the auricular appendages.

We may ascribe the production of the presystolic murmur, in beginning obstruction of the mitral orifice, to the force of the left auricle. Temporary compensation is promptly established in the force of the circulation. It seems that there is a reserved force, as in involuntary muscles, which is called forth in the emergency.

We further admit, that, as the result of obstruction at the mitral orifice,impeding the influx of blood into the left ventricle during the diastole, the left auricle, having extra work to perform,does become first dilated and subsequently hypertrophied. Indeed percussion in rare instances reveals abnormal bulging over the auricle, and frequently, the pulsation of the auricle is perceptible about the 4th rib. The walls of the left auricle,which are normally about one line and a half in thickness, may be increased to as much as one quarter of an inch with proportionate augmentation in strength. It may be that the prolongation of the bruit is due to this hypertrophy, but it is almost incredible, when we know that it is the longest as well as the most irregular and vibrating of all cardiac murmurs. We question whether it is a force, sufficient by itself, to overcome the resistance caused by advanced mitral constriction and to give us the acoustic characteristics of the presystolic murmur. It must be borne in mind, that the auricular systole does not occur until the very last portion of the diastole and that the murmur often begins after the second sound and includes the so called "post-diastolic." These phenomena occur previous to the auricular systole. We readily admit also that its influence is shown in reinforcing the intensity of these murmurs.

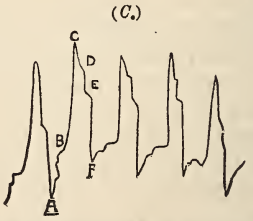
In mitral stenosis the auricular portion of the cardiagrams is of longer duration, and its tracing higher, because the left auricle is dilated, and contracts with force, emptying itself with difficulty; it often shows a series of wavelets giving it a serrated appearance corresponding to the purring thrill felt by the hand. Ott, Hess and Galabin attribute the late closure of the pulmonary valves to the diminished elasticity of the artery in consequence of long-continued high pressure in it.

FIGURE 3.



A. B.—Systolic of auricle. *B. C.*—Systolic of ventricle. *D.*—Closure a rtic valves. *E.*—Closure pulmonic valves. *E. F.*—Ventricular diastole.

a.—Mitral stenos s pulse rate 80 (after Galabin).
b.—Mitral stenosis l ng, rough presystolic murmur, pulse rate 57 (after Galabin).



c.—Normal curve from man (after Landois).

The cardiagram of the normal heart (see Landois' Physiology) shows that the aortic valves close a little before the pulmonic valves. They close, however, so

near together that only a single sound is heard. In mitral stenosis (stage of non-compensation) the aortic valve closes sooner and the pulmonic valves later than normal. This is because the left ventricle contains less blood and the right more than normally. There results what is called a reduplicated second sound, which is an increase of a physiological condition. All conditions which cause the aortic valves to close rapidly (diminished amount of blood in the left ventricle) and the pulmonary valves to close later (congestion of the right ventricle) — both found in mitral stenosis, favor the production of a reduplicated second sound which occurs in one-third of the cases of mitral stenosis.

If mitral contraction occurs at a very early period of life, whether as a primary affection or secondary to a corresponding narrowing of the tricuspid, other parts of the circulatory system become accommodated to it, and the patient may reach adult life before the lesion produces any symptoms—the post-mortem revealing the fact of the organic defect. Dr. Wilkes reports cases in which the resulting hypertrophy of the right side in children was so great as to cause bulging of the chest, and in which the pulmonary artery partook of the hypertrophy and became thicker than the aorta. There are cases, on the other hand, occurring in which, owing to mitral stenosis early in life, so small a quantity of blood is thrown into the left heart, that there is imperfect nutrition of the whole body which accommodates itself to the defect. Hypertrophy of the right ventricle and left auricle compensate so thoroughly for the deficiency that there may be no subjective symptoms, and no bruit perhaps beyond an imperfect first sound.

Dr. Gairdner did not ascribe the production of the presystolic murmur wholly to the muscular contraction of the auricle. Dr. Wilkes held that the murmur might anticipate the auricular systole and that it might occur not only at that time, but also during the heart's diastole and pause. Dr. Galabin came to a like conclusion from the evidence afforded by the cardiograph. Dr. Sansom claims that the causation of the presystolic murmur may be independent of the auricle, he states: "that in many cases he had observed that though there had been a prolonged presystolic murmur commencing in the long pause almost immediately after the second sound, cardiographic evidence has shown the auricular systole to occupy its normal position just anterior to the commencing contraction of the ventricle." He cites a case in which a murmur occupied at one time a portion of, and at another almost the whole of the long pause, and the autopsy showed that the auricular systole could have had no share in producing such a murmur, for not only was the left auricle so dilated that its walls could have exerted no appreciable muscular power, but it was lined by a closely adherent old laminated blood clot. It thus appears that the post-diastolic murmur, as well as the presystolic, may be caused in the diastole, and be due to the entrance of the blood independently of the auricular systole, it being urged through the stenosed aperture owing to the tension under which it has been retained in the elastic and distended auricle and pulmonary veins.

FIGURE 4.

Sansom's case of mitral stenosis while auricular systole is in normal position.

We feel justified in concluding that the systole of the left auricle is a factor of greater or less force in the production of this mitral direct murmur, but it is not the only one and the others may produce it independently of the auricular systole.

Negative Pressure. — Let us see whether any negative pressure is brought to bear upon the left auricle and pulmonary veins to assist in getting the current into the left ventricle. Is there any suction action of the left ventricle of the heart? "There is hardly a question," say Goltz and Gaule, "which has been so much disputed since the beginning of

physiological science as that relating to the diastolic suction of the heart." Until the publication in 1878 of Goltz and Gaule's experiments, the majority of physiologists attached little or no importance to any suction action of the heart, although in all times there have been zealous advocates of the doctrine that diastolic suction was an important factor in the circulation. Goltz and Gaule, by the use of ingeniously constructed maximum and minimum manometers, determined the maximum and minimum pressures in the left and in the right ventricles. They found, with natural respiration, in the left ventricle of a dog, a negative pressure of 52 mm. mercury. In the right ventricle they found, in another case, a negative pressure of 17.2 mm. mercury.

In accordance with the generally accepted ideas, they at first were inclined to attribute this negative pressure to the expansion of the chest during inspiration. To their great astonishment, however, they found after the chest was opened and independently of respiration, a negative pressure in the left ventricle of 23.5 mm. mercury. This latter negative pressure therefore cannot be due to the elastic traction of the lungs. They attribute it to the elastic resilience of the ventricle following the systole, like that after compression of an elastic balloon. They say: "The adherents of the doctrine, according to which the heart acts as a suction pump, will find their boldest expectations surpassed, when they hear that the suction force of the left heart of a large dog at the beginning of the diastole is equal to a column of water 320 mm. high (23.5 mm. mercury) and that this force in a healthy man is probably even much higher." (Goltz und Gaule. "Ueber die Drückverhältnisse im Innern des Herzens." Pflüger's Archiv. Bd. 17, S. 100, 1878.)

In 1879 Moens published an article (Die erste Wellengipfel in dem absteigenden Schenkel der Pulscurve, Pflüger's Archiv. Bd. 20 S. 617, 1879) in which he attempted to show that the negative pressure found by Goltz and Gaule existed, not during the diastole, but during the systole. In order to make clear how a negative pressure might be produced at this period of the heart's action, he takes an elastic tube open at one end and connected at the other by means of a stop cock with a pressure bottle. If the stop cock be suddenly closed while the fluid is flowing from the bottle through the tube, there is a negative pressure produced in the tube beginning near the stop cock. Likewise in the left ventricle, he argues, that as the blood is shot out by the ventricular contractor into the aorta, a negative pressure is produced in the ventricle. His chief argument, that the negative pressure is present during the systole and not during the diastole, is, that a minimum manometer passed down the jugular vein into the superior vena cava, failed to register negative pressure as would be the case if the right ventricle exerted diastolic suction. He regards this experiment as proving that the negative pressure is not during the diastole, otherwise there would be a suction force exerted on the blood in the right auricle and vena cava superior. If the negative pressure is not during the diastole it must be during the systole.

It will be observed that Moens does not actually demonstrate that the negative pressure is during the systole. He infers it indirectly. On the other hand, he seems to have overlooked the fact that Goltz and Gaule found a negative pressure in the right auricle of 11.2 mm. mercury (this might have been due to inspiration), the negative pressure in the right ventricle in the same case being 17.2 mm. mercury. Moens is quoted by Martin and Donaldson, Jr. as having shown that the negative pressure exerts no suction force on the blood in the auricles.

In consequence of the doubt which Moen's work raised as to the period at which negative pressure existed in the ventricles, de Jager in 1883 ("Ueber die Saugkraft des Herzens," Pflüger's Archiv. Bd. 30, S. 491) published experiments on this question, and came to conclusions in opposition to Moen's and in confirmation of Goltz and Gaule. De Jager determined that the pressure at the beginning of the aorta, never becomes negative as it should be in case the

negative pressure in the ventricle were due to the suction of the column of blood poured out from the ventricle. He also found that with the chest open, so that the action of inspiration on the aspiration of blood into the right heart was removed, the pressure in the right auricle becomes negative. He found negative pressures in the right auricle of 2 mm. to 6 mm. mercury. He does not believe that the auricles themselves are capable of exerting any suction force, and he therefore concludes that this negative pressure in the right auricle can be interpreted only as evidence of a suction exerted by it which of course can occur only during diastole. The same conditions would of course obtain for the left cavities of the heart, as the experiments were made with the chest open. Dr. Jager therefore concludes that a strong diastolic suction force is exerted by the ventricles.

As regards the causes of this suction force he mentions several possibilities, without coming to a decision. These possibilities are:

1. The elastic force developed during the systole, as in the compression of a rubber balloon.

2. The suction force on the exterior of the heart resulting from the negative pressure in the thorax (or the elastic traction of the lungs). This of course can be only one element, as negative intra ventricular pressure is found after the thorax is opened.

3. Shortening of the large arteries coming from the heart.

Brücke inclines, as do Goltz and Ganle, to consider these factors as the essential ones.

Gruenhagen, published in 1885, considers that Goltze and Gaule and de Jager have established the fact of a diastolic suction action of the heart.

The experiments of Martin and Donaldson Junior, however, on the mamalian heart at the Johns Hopkins University, are opposed to the existence of any suction action of the heart. Their experiments are exact and it would seem quite conclusive against the suction theory. It is difficult, however, at present to reconcile them with Goltz and Gaule's and de Jager's experiments. They have the merit of putting the matter to a direct test, whereas the other experiments do not actually demonstrate a suction action, but leave it as an inference. They say:

"The negative pressure proved by Goltz and Gaule to occur in the ventricles for a brief period at the end of the systole, had already been shown by Moens not to affect the auricles, and therefore to be without effect in making the heart a suction pump as far as the venous system was concerned.

Once the "aspiration of the thorax" has been eliminated, the right auricle of the mammalian heart will not receive blood unless supplied to it under a decided, if small, positive pressure. While the heart in the closed thoracic cavity may, and probably does, act as a suction pump, this is not due directly to an active expanding force of the heart, but is the secondary result of the pneumatic conditions prevailing within the normal closed chest cavity."

If a suction action exists, it is evidently a factor not to be neglected in the study of mitral stenosis. All that increases this suction action, increases the force with which the blood passes through the narrowed mitral orifice and doubtless increases the murmur. De Jager found that when the action of the heart became feeble—as after long exposure, or by cooling, or by loss of blood—then only a slight negative pressure, or none, was produced in the ventricles. We may therefore, infer that all circumstances which enfeeble the action of the left ventricle diminish correspondingly the force of suction, and therefore the murmur. Such circumstances are failure of the heart's force from any cause, among which may be noted atrophy of the left ventricle in pure mitral stenosis. In general, whether the left ventricle is atrophied or not, the small amount of blood which it receives through the narrowed mitral orifice during non-compensation, must be attended with a weaker systole and consequently diminished suction and lessened murmur. All this line of argumentation, of course, is not pertinent, if we accept the doctrine

that no suction-force is exerted by ventricles.

Let us further inquire what other force there is connected with the passage of the blood through the left ventricle. We hear of the blood's passive flow through the mitral orifice. Has it no power? The right ventricle, which propels its contents with a strong wave through the pulmonary arteries and with comparative ease, owing to absence of tonus or resistence, and of vasor-motor influence, to contend against, the blood enters the pulmonary veins and passes through the left auricle into the ventricle. If it meets with any obstruction the backward pressure would, of itself, add to the onward blood-pressure in the pulmonary veins, although the right ventricle promptly exerts its reserved compensatory force. If the obstruction continues, the extra work of the right ventricle gradually produces permanent hypertrophy which keeps up the compensation. When this is broken there results the disastrous backward flow of venous blood with all its unpleasant consequences, upon the lungs, liver and other internal organs.

This occurs, notwithstanding the protection afforded to the process of intra-pulmonary respiration, as shown in the safety-valve construction of the tricuspid-valve (King) of the pulmonary semilunar valves (Flint, Jr.), and of the obstruction safety-valve principle of the pulmonary valve. (Guitéras) The increased tension at the pulmonary valves gives accentuation of the second sound. Nature further provides a relief to the lungs, by the increased capacity of the right cavities by from 1–10 to 1–3 over the corresponding cavities of the left side.

The right ventricle becomes very gradually hypertrophied. In some cases the enormously thickened walls completely cover over the left ventricle and prevent our hearing the second sound at the apex and a very feeble impulse is noticed. The left ventricle, owing to the insufficient supply of blood through the auricular-ventricular orifice, is often, not only not hypertrophied, but actually materially lessened in size indeed, in a state of atrophy, unless there is also insufficiency of the mitral orifice as a complication. This additional lesion may cause hypertrophy of the left ventricle. May not the powerful right ventricle, by the blood pressure it causes in the pulmonary veins, be a prominent factor in causing variations, in the length and intensity of the post-diastolic and the presystolic murmers in mitral stenosis?

If this hypertrophy be very marked, may it not be the propelling force producing the long sound commencing immediately after the systole and occupying the whole of the diastole? If the force be feeble, it may only produce the post-diastolic and cause the deficiency in the middle of the distance between the second and first sound. When the patient is in the recumbent position and the heart is quiet, the murmur is often inaudible—on changing the position it may be heard. Active exercise increases in marked degree the intensity of the murmur. When dilatation succeeds the hypertrophy of the right ventricle and tricuspid insufficiency takes place, the forces are powerful enough to cause the murmur. The auricular systole, if dilatation has not made the walls too feeble, may give rise to the presystolic. The increased power of the hypertrophied left auricle and right ventricle certainly would cause the fluid veins to be audible vibrations in obstructive mitral disease. As the muscular power leaves the excessively enfeebled patient, the sound utterly disappears. Indeed it is very remarkable how the murmer sometimes disappears, temporarily or permanently, the condition of the valve being unaltered.

To sum up, (says Dr Galabin in his elaborate and able paper on "Interpretation of Cardiographic Tracings" (Guy's Hosps. Reports) the inferences suggested by a general review of all the tracings" it appears to me that the evidence of the cardiograph is in favor of the view that two totally distinct murmurs may be caused by mitral contraction—first the auriculo-systolic bruit, which may either run up to the first sound or be separated from it by a short interval; and, secondly, a diastolic bruit, due to the venous flow through the narrow and

roughened orifice which in rare cases may be blowing in quality and separated from the succeeding systole by a long pause; and that, thirdly, these two may be merged together into a compound murmur, somewhat rough from its commencement, but much intensified in loudness and harshness towards its conclusion.

Marey, in some experiments by means of which he reproduced the various sounds and murmurs of the heart, the auricle of which was not contractile, introduced a plug perforated by a hole between the auricle and ventricle, and then found that a diastolic murmur was produced, but only when the auricular pressure exceeded a certain point. Hence he concludes, that the murmur of mitral stenosis may be either diastolic or auriculo-systolic according to circumstances.

How far is our estimate of the pressure in the pulmonary veins justified by experimental research? From this source we possess but little positive knowledge.

Beutner seems to be the only authority who has published any actual measurement of the blood pressure in the pulmonary veins. He found a positive pressure of 10 mm. of mercury in a pulmonary vein of a cat. In the pulmonary artery of a cat he found a presure of 17.6 mm. mercury. These pressures were of course measured with the thorax open, so that we cannot attach absolute value to them. They indicate, however, that, relatively to the pressure in the pulmonary artery, the pressure in the pulmonary vein is high, the pressure in the veins being more than one-half that in the artery. The pressure in the pulmonary vein according to Beutner's measurement is, moreover, absolutely a high one, when compared with the very low pressure in the veins emptying into the right auricle. The pressure which Beutner found in the pulmonary artery is much lower than has been found by subsequent observers. The accepted belief is that the pressure in the pulmonary artery is $\frac{1}{3}$ of that in the aorta; Goltz and Gaule regard it as $\frac{2}{3}$ of the aortic pressure. If the ratio which Beutner found between the pressure in the pulmonary vein and that in the pulmonary artery holds true, then we may conclude that the pressure in the pulmonary vein is even higher than his observations indicate.

Inasmuch as actual measurement of the pressure in the pulmonary vein can be made only when the thorax on one side is open, the question arises: what influence upon this pressure has the resilience of the lungs under the normal conditions of respiration? If the walls of the pulmonary artery and those of the pulmonary veins were of the same thickness, then, inasmuch as both vessels were subjected to the same intra-thoracic pressure, it is evident that changes in the intra-thoracic pressure, corresponding to the different phases of respiration, would not influence the blood pressure. The walls of the pulmonary veins, however, are thinner than those of the pulmonary artery, therefore the aspiration of the thorax must tend to lower the pressure in the pulmonary veins more than in the pulmonary arteries. It is impossible to say how great is this influence of the elasticity of the lungs upon the pressure in the pulmonary veins.

The feeble tonus of the vessels, in the pulmonary circulation is of the utmost importance as changes in pressure in the pulmonary veins are quickly manifested in the pulmonary arteries and vice versa.

This circumstance justifies us in assuming that elevation or lowering of pressure in the pulmonary artery is attended by corresponding changes of pressure in the pulmonary veins, so that changes in the force of contraction of the right heart exert a much more direct influence upon the circulation of blood in the pulmonary veins than in the left heart and the systemic veins.

Cohnheim says "The blood in the pulmonary veins is, under physiological conditions, not like that of the systemic veins under negative pressure when it enters the the heart, but is under a positive pressure, which is only a little less than that of the blood in the pulmonary artery." (*Vorlesungen über allgemeine Pathologie, Bd. I. s.* 28, *Berlin* 1882.) This statement of Cohnheim does not seem to rest on the actual measurement,

but to be based upon the slight resistance offered to the blood in the passage from the pulmonary artery to the pulmonary vein, and upon Beutner's measurement with open thorax. He found the pressure in the pulmonary vein more than ½ that in the pulmonary artery. As no means have been found which enable as to measure the pressure in the pulmonary veins under natural conditions, we are left to such inferences as the above.

Society Reports.

BALTIMORE MEDICAL SOCIETY.

STATED MEETING, JUNE 11, 1888.

Dr. Ingle, the President, in the Chair.

Dr. Jones related the case of a lady, 24 years old, in labor, with feeble expulsion pains; gave chloroform as pains were poorly borne by mother. As head of child came to the perineum, there was heard a gurgling sound. Noticed the head of the child and it was black—congested. On examining, found cord tightly wound around the neck and had to cut it before delivery. The child was born alive.

Dr. Ellis related the case of a child two months old which was said to have had spasms. Gave treatment. On the 3rd day, while at the house, saw the child in a spasm. The child had been having three or four a day for two weeks. There was no fever or digestive disturbance whatever. Diagnosis, epileptoid convulsions. He had never before seen them in one so young. Had to give bromide of potash freely.

Dr. Gibbons asked Dr. Jones how he accounted for the gurgling sound?

Dr. Jones replied that he thought it due to asphyxia.

Dr. Waters related the following case: An infant, aged 3 months, had a swelling in the inguinal region, which seemed to be a part of gut, filled with feces. A purgative was ordered and the swelling decreased in a measure. Called in Dr. Michael. We could not positively make out the nature of the swelling and decided to let it alone. It may be a hydrocele of the cord.

Dr. Rohé asked if it might not be an omental hernia.

Dr. Waters said it certainly was not a hernia.

The discussion of Dr. Earle's paper on

ELECTRO-THERAPEUTICS,

read at the last meeting, was then continued.

Dr. Ellis asked Dr. Earle the effect of electricity on hydrocele. How can electricity cause the resorption of fluid in cavities?

Dr. Earle said, "Draw off the fluid first. Electricity does not cause the absorption of fluid already formed but it prevents its recurrence after being drawn off."

Dr. Rohé said, "It is thought best not to draw off the fluid but to cause decomposition in part of the fluid and in some way it then causes its disappearance. Electricity is best used in recent cases. A month ago I saw a patient with hydrops articulis. On first appearance, I suspected myelitis. History:—Four months ago the patient had inflammatory rheumatism, which left the ankle joint enlarged. There was an accumulation of fluid and much pain.

Treatment: — Internally, antipyrin was given with no good effect. Electricity was then used, much improvement was observed. Have now been treating him four weeks and he is much improved; there is less pain and the swelling has almost disappeared. In addition to the electricity, massage has been applied. In a month he will probably be well."

Dr. Blake asked how many sittings the patient had?

Dr. Rohé said about twenty, of twenty minutes duration.

Dr. Blake thought Dr. Rohé's case simpy a vaso-motor disturbance, allowing transudation of serum in and around the joint. He thought the electricity did not cause the absorption of the fluid but only stimulated the vaso-motor system to do so.

Dr. Rohé said he believes the electric

current does have a chemical action and he therefore differs from Dr. Blake. Electricity does not pass around by the skin but through the joint.

Dr. Rohé related the case of a negress in whom he used a strong electric current, 130 sittings, and caused the disappearance of callus of the elbow-joint, motion becoming good. He agrees with Dr. Blake that there was vaso-motor disturbance in the first case, doing it good.

Dr. Earle said he did not agree with Dr. Rohé in ascribing chemical action to electricity in absorbing fluids. He thinks that fluid is absorbed through the stimulation of the vaso-motor nerves.

Dr. H. H. Biedler reported the removal of an *angioma* of the upper lip. The patient, a male, aged 27, had had a tumor of the lip from birth, which constantly increased in size. There was no clincial history of epithelioma. He operated. There was much of blood. The patient made a good recovery and is now well.

Dr. Ellis moved that the society take some action on the death of Dr. Watts. A committee of three—Drs. Ellis, Waters and Blake—was appointed to draft resolutions, have them published and send an engrossed copy to the family.

The Society then adjourned.

HENRY B. GWYNN, M.D.
Reporting and Recording Sec'y.

Reviews, Books and Pamphlets.

The Medical Directory and Register for Baltimore, Washington, Maryland and District of Columbia. Containing full and complete list of Physicians, Dentists and Druggists; also descriptins and details relating to Colleges, Hospitals, Dispensaries, Homes, Reformatories and complete list of Medical Colleges in the United States and Canadas. 1888. R. L. Polk & Co., Publishers. Compiled and Arranged by B. R. SHERIFF, Manager, 112 North Charles Street, Baltimore. Price $2.00.

In common with other large cities of the East, Baltimore has at last a Medical Register, one containing not only an alphabetical list of all physicians, dentistis and druggists of the city, State and District of Columbia, but their dates of graduation, exact address, office hours, and position they occupy and societies of which they are members. Not only this, but the book contains a list of all national medical associations, of all local associations and societies, all medical schools, colleges and hospitals with their list of teachers, attending physicians, etc., etc.; the code of ethics, fee table of the Medical and Chirurgical Faculty of Maryland, and in fact everything that should make up a complete medical directory. The book is well bound and neatly printed with no apparent typographical errors, and compares favorably with similar works of New York and Philadelphia.

There are, however, some points which no one except physicians might notice. Among the list of patrons, *i. e.*, those who either bought the work or advertised in it, are several well known Philadelpia obstetricians—surgeons who appear as consultants. Also some very doubtful names have found their way into the list of advertisers and even among the physicians. Such faults, however, could not have been obviated in consideration of the fact that the book was published without supervision by a medical man. A few names have been omitted and occasionally errors made, but very few in proportion to the magnitude of the undertaking. As the directory is published for the benefit of the profession and others and is not in any way intended to advertise physicians, it is a pity that some men have seen fit not to reply to the inquries, and others have failed to put all their societies and positions after their names—a thing which is often a convenience to their friends.

The book is one of great usefulness and cannot fail to be appreciated by all who possess it and to the undertakers of the work great credit is due. It is to be hoped, therefore, that a sufficient sale will guarantee the issue of an edition every one or two years and that the work will receive the patronage which it deserves. The errors and omissions will be corrected in future editions.

Therapeutics: Its Principles and Practice. By H. C. Wood, M.D., LL. D., Professor of Materia Medica and Therapeutics, and Clinical Professor of Diseases of the Nervous System, in the University of Pennsylvania. A Work on Medical Agencies, Drugs, and Poisons, with Special Reference to the Relations between Physiology and Clinical Medicine. The Seventh Edition of a Treatise on Therapeutics, rearranged, rewritten, and enlarged. Philadelphia: J. B. Lippincott Company, 1888. Baltimore, Cushings & Bailey. 1888. Pp. 908. $6 cloth.

The seventh edition of this very valuable work comes to us with many important additions and a change of title. That part treating of massage, feeding, diet, etc., has been placed at the beginning of the work, while by far the largest part of the work treats of drugs. The very recent remedies receives careful attention and their virtues have been carefully tested by the writer who has also been untiring in consulting the literature of the subject. The physiological action of the drug is particularly discussed while the therapeutics is left largely for other works. The book gives evidence of extreme care in every detail.

The Modern Treatment of Diseases of the Liver, by Prof. Dujardin-Beaumets. Translated from the fifth French Edition by E. P. Hurd, M.D., Newbuayport, Mass. [Physicians' Leisure Library.] 1888. Geo. S. Davis, Detroit, Mich. Pp. 180, price 25 cts.

The well known lectures of Dujardin-Beaumets so well translated by Dr. E. P. Hurd, comprise in a clear and succinct form the newest treatment of jaundice, engorgement of the liver, etc., as well as a tabulated list of the various cholagogues in order of their activity.

A Text Book of Pharmacology, Therapentics and Materia Medica, by T. Lauder Brunton, M.D., D.Sc. F.R.S., adapted to the United States Pharmacopœa by Francis H. Williams, M.D., Boston, Mass. Third Edition. Philadelphia, Lea Brothers & Co. 1888. Baltimore, Cushings & Bailey. Pp. 1261.

The third edition of this book differs in some respect from the first, in treating more fully of the bacteria and the effect of drugs on protoplasm. The chapter on antipyretics is necessarily much change to keep up with modern ideas. The general index and the index of diseases and remedies are both well done and add much to the value of the book.

Manual of Chemistry. A Guide to Lectures and Laboratory-Work for Beginners in Chemistry. A Text-Book specially adapted for Students of Pharmacy and Medicine. By W. Simon, Ph.D., M. D., Professor of Chemistry and Toxicology in the College of Physicians and Surgeons; Professor of Chemistry and Analytical Chemistry in the Maryland College of Pharmacy, Baltimore, Md. Second Edition, Thoroughly Revised and greatly enlarged, with forty-four illustrations and seven colored plates representing fifty six Chemical Reactions. Philadelphia, Lea Brothers & Co. 1888. Pp. 479. $3.25.

The second edition of this manual will be warmly greeted by young students of chemistry and pharmacy. The strides which chemistry makes each year render a constant revision necessary and Professor Simon has made his book a modern helper in the laboratory. The colored plates are a great addition.

Excessive Venery, Masturbation and Continence; the Etiology, Pathology and Treatment of the Diseases resulting from Venereal Excesses, Masturbation and Continence. By Joseph W. Howe, M.D., author of "Emergencies" etc. N. Y. E. B. Treat. 1888. Pp. 299.

Some subjects are always unpleasant to discuss and the subject of this book is truly one of them. It treats of masturbation and excessive venery and the diseases, real and imagnary, which arose therefrom, with perfect freedom. At times the pages read like a quack advertisement but on the whole the book is very truthful.

The Theory and Practice of the Ophthalmoscope. A Hand-book for Students. By JOHN HERBERT CLAIBORNE, JR., M.D., Instructor in Ophthalmology in the New York Polyclinic, etc. Detroit: George S. Davis, 1888. Pp. xi–77. [The Physicians' Leisure Library.] Price 25 cents.

A Text-Book of Human Physiology. By AUSTIN FLINT, M.D., LL.D., Professor of Physiology and Physiological Anatomy in Bellevue Hospital Medical College, New York, etc. With 316 figures in the text and two plates. Fourth edition, entirely rewritten. New York: D. Appleton & Co. 1888. Baltimore: Cushings & Bailey.

A Manual of General Pathology; Designed as an Introduction to the Practice of Medicine. By JOSEPH FRANK PAYNE, M.D., Oxon., F. R. C. P., late Fellow of Magadalen College, Oxford, etc. With 150 illustrations. Philadelphia: Lea Brothers & Co. 1888. Baltimore: Cushings & Bailey.

Disinfection and Disinfectants, their Application and use in the Prevention and Treatment of Diseases in Public and Private Sanitation, by the Committee on Disinfectants appointed by The American Public Health Association. Concord, N. H. Republican Press Association, 22 North Main St. 1888. Pp. 266.

Quitz Compends? No. 8. A Compend of the Diseases of the Eye, including Refraction and Surgical Operations, by L. WEBSTER FOX, M.D., and GEO. M. GOULD, M.D., Second Edition, revised and enlarged, with 71 illustrations. Philadelphia: P. Blakiston Son & Co., 1012 Walnut Street. 1888. Pp. 164. Price $1.00.

Two Cases of Removal of Uterine Myoma; One Suprapubic Hysterectomy; the other, Complete Hysterectomy. By MARY A. DIXON JONES, M.D., Surgeon to the Woman's Hospital of Brooklyn. Reprint from *N. Y. Med. Jour.*

Index-Catalogue of the Library of the Surgeon-General's Office. United States Army. Authors and Subjects. Vol. IX. Medicine (Popular)—Nywelt. Washington: Government Printing-Office, 1888. Pp. 13—1054.

Transactions of the Medical Society of the State of Pennsylvania at its 39th Annual Session held at Philadelphia, June, 1888. Vol. XX.

The Significance of the Epiblastic Origin of the Central Nervous System. Presidential Address delivered at the annual meeting of the New York Neurological Society, May 1st, 1888, by DR. GEORGE W. JACOBY. Reprinted from the *New York Medical Journal*, for May 5th, 1888.

Scribner's Monthly for October.

INTERNATIONAL CONGRESS OF MEDICAL JURISPRUDENCE. — *The Medico-Legal Society of New York* has decided to hold an International Congress of Medical Jurisprudence in the city of New York during the year 1889, at which representatives from all countries will be invited to attend and contribute papers. It is proposed that the Congress shall continue four days—the time of meeting to be determined hereafter. Arrangements will be made for reduced fare.

All foreign delegates and invited guests from abroad, and all members of the society residing in the various States of the Union and the Canadas will be entertained by the resident members as invited guests.

The leading societies, home and foreign, who are pursuing kindred studies are invited to send delegates.

The General Committe of Arrangements will be announced later, as soon as formed.

The Sub-Committee, which now has the affair in charge, is composed as follows:

Moritz Ellinger, Esq., Chairman; Clark Bell, Esq.; Dr. Isaac Lewis Peet; Stephen Smith, M. D.; Judge Noah Davis, and E. W. Chamberlain, Esq.

Moritz Ellinger, Corresponding Secretary of the Medico-Legal Society, New York.—*Sanitarian.*

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BALTIMORE, OCTOBER 20, 1888.

Editorial.

REFORMS IN MEDICAL EDUCATION.—Introductory speeches and addresses on general subjects before medical bodies generally contain so much repetition and trite sayings that it is a pleasure to turn to the introductory address of Mr. Charles Stonham, F. R. C. S., as delivered before the Westminster Hospital Medical School, London (*Lancet*, Oct. 6, 1888). To any one familiar with the careful training of the Engish Medical Schools, it would not seem as if many reforms could be needed. Unfortunately an address on the reforms needed in the medical schools of the United Statss would be so long that few would care to read it. In all medical schools there are a few live teachers who feel the need of more clinical and fewer didactic lectures. In our country few schools demand more than two years and yet Mr. Stonham thinks that for the English student four years are too few and suggest a course of five years. In making the preliminary examination more rigid, more are kept out of the profession and the fittest usually survive. This part is obviously our duty, for he says:

"It is grossly unfair to let youths of inferior ability become medical students: it is unfair to themselves, because they only waste years of life and energy in vainly trying to do work for which nature has never fitted them, when their powers might have been usefully turned in other directions; it is unfair to their parents or guardians, who have to provide the money for their education, in the fond hope that it is being profitably employed, whilst, in reality, it is being utterly wasted; it is unfair to the schools to whom such students belong that a constant series of predestined chronics should be provided, to demoralise others, and to hamper the efforts of the teachers; it is unfair to the public that anyone should be allowed the chance of attaining even the most inferior professional diploma who has only just been able to scrape through, little by little, the lowest preliminary examination as it now exists; finally, it is unfair to the profession as a whole that persons should be allowed to become recognised members of it who ought to have been extinguished at the very earliest stage of their career—for the old saying, that a chain is only as strong as its weakest link, applies, to some extent, even to the profession."

Having once begun to study the way seems very dark. The bewildered student visits one lecture room after the other and hears lectures on some subjects which might, perhaps, be better studied from a work—perhaps the very book which the professor consults. In anatomy, the lectures are very delusive, the student often trusting to the lecture alone as a preparation for as part of the examination and not doing a sufficient amount of practical work. Mr. Stonham impresses the importance of studying anatomy as connected with surgery and not as if it were a separate and distinct thing. He bewails the loss of time spent in the study of botany and very sensibly objects to the manner of teaching materia medica by which the student is made to learn the family, etc., of the drug (if vegetable), its geographical source and methods of preparation and even made to memorize the doses—a thing which can only be learned by constant practice in writing and compounding prescriptions. He

recommends students to pay as much attention as possible to morbid anatomy as few opportunities present themselves for studying this branch after one is engaged in active practice. Diseases of the skin, eye and ear, throat, nerves and women are not sufficiently considered in the course and to accomplish all that he proposes a five-year term of study. These reforms might be thought of in England or on the continent where medical instruction is so strictly carried out, but in this country where most of the medical schools are private institutions, and a large class of students means a large sum of money in each teacher's posket, it is hardly human to expect many difficulties to be put in the way of obtaining the much abused title of M.D. When institutions are governed by other than mercenary motives medical education here will advance.

Resuscitation in Threatened Death from Chloroform.—In a very interesting article upon this subject Dr. F.T. Miles (*Medical Record,* June 16, 1888) gives a new explanation of the well-known fact that patients threatened with death from inhalation of chlhroform may be saved by prompt inversion of their bodies.

He rejects the view commonly held that in this position the circulation of blood through the brain-centres, which govern the action of the heart and lungs, is favored or retarded. In order that the patient may be saved, not the brain but the *heart* must be stimulated. The good affect seen after inversion of the body comes from the flow of blood, in this position, downward from the liver and vena cava into the right auricle and ventricle of the heart. Possibly the sudden pressure of the heavy liver against the diaphragm and heart may also be of benefit.

In one case observed by him, in which death seemed imminent from sudden stopping of the heart during chloroform inhalation, that organ was excited to contraction by pretty heavy blows with the open palm upon the cardiac region. Dr. Miles thinks that in desperate cases one might venture even to prick the heart with a needle at the place where it is left uncovered by the lung, using the needle perhaps for the passage of an electric current directly through the heart tissue.

His suggestion in regard to the effect of inversion is ingenious, and his explanation of the mode of recovery seems to be the true one. Inversion of the body leads so surely to revival in all cases in which revival is possible, that the physician is guilty of criminal neglect who fails in cases of threatened death from chloroform to invert the body of the patient *at once*, and to *keep it in that position* until revival has occurred or until after the use of all other known remedies it is quite evident that the patient is hopelessly dead.

Miscellany.

The Hoagland Laboratory, Henry Street, Cor. Pacific. Brooklyn, October 15, 1888.—The Trustees of the Hoagland Laboratory take pleasure in announcing to the medical profession of Brooklyn the completion of the Laboratory and its equipment for practical work.

Special facilities are offered to those who desire to prosecute original research. For this purpose private laboratories have been provided, and arrangements are now being made for the purchase of a library which shall contain all the literature necessary for reference in the departments of Bacteriology, Physiology and Pathology.

Owing to the absence in the South of Dr. George M. Sternberg, the director, in the further prosecution of his investigations into the cause of yellow fever under orders from the President of the United States, the course of lectures on Bacteriology, already announced, will be postponed until his return.

The Trutees further announce that the services of George T. Kemp, Ph. D., Johns Hopkins University, have been ob-

tained as Associate in Bacteriology and Physiology, and that, with his assistance and under the direction of Dr. Sternberg, practical instruction in Bacteriology will be given during the winter and spring. Inasmuch as Dr. Kemp will be at the Laboratory daily from 9 A. M. until 5. P. M., this instruction may be taken at any time during these hours.

The fee for this course of instruction has been placed at $15, which will entitle the subscriber to prosecute his studies until June 1, 1889, during as many hours of the day as he may desire.

Applications for subscriptions to this course may be directed to J. H. RAYMOND, M. D., Secretary.

C. N. HOAGLAND, M. D.,
President Board of Trustees.

THE CAUSE OF SEA SICKNESS.—At a recent meeting of the Paris Academy of Medicine a paper was read by M. Pampoukis (of Athens) and M. Dastre, upon experiments on "sea vertigo" (*le vertige marin*). They show that, in spite of their peritoneal connexions, the abdominal viscera are considerably shaken in movements of the body, and that they impinge particularly against the diaphragm and anterior abdominal wall. Owing to this, contractions occurs through irritation of sensory nerves, with the effect of limiting the visceral movements. It is suggested that the Pacinian corpuscles in the mesentery may be the structures which are stimulated by the dragging of the mesenteric nerves occasioned by the movements referred to, and that through their irritation motor impulses are excited reflexly. Abdominal belts which restrain the movements of the viscera against the wall do not, however, prevent those against the diaphragm.—*Lancet.*

HOT AIR INHALATIONS IN PHTHISIS.—Two German observers, or, to speak more correctly, two observers in Germany, have, independently of one another, been engaged in investigations on the bactericidal property of heated dry air, and on the methods of ultilising this property for the practical treatment of phthisical patients. Dr. Weigert, who appears to be an American living in Berlin, finding that tubercle bacilli outside the body die at a temperature of 41°C., and are adversely affected by one of 38°, had constructed an apparatus for the inhalation of heated air, and commenced to make trials on phthisical patients in the early stage recommended to him by other medical men, he himself not being in practice. At first a temperature of from 40° to 60°C. was employed, the air for inhalation being quite dry. This temperature was gradually raised as high as 80°C. The patients bore this hot dry air exceedingly well, and continued to inhale it for three or four hours a day during a month, the only unpleasant effects produced being hyperæmia and dryness of the mucous membrane. The general effects are represented as having been remarkable, patients who had been falling away picking up strength and becoming quite robust, the physical examination showing at the same time that the dulness and râles had perceptibly decreased. The bacilli in the sputum, which had been very numerous, rapidly diminished in number, and finally disappeared altogether. These observations were confirmed by several other medical men. Dr. Halter, of Lengerich, Westphalia, seems to have gone even further than Dr. Weigert, he having himself inhaled, and caused ptients also to inhale, dry air heated to 190° C., with satisfactory results. — *Lancet.*

COCAINE IN HYDROPHOBIA. — Dr. S. Fubini, of Palermo, has recently reported a case of hydrophobia in which local applications of cocaine gave marked relief to the characteristic spasms of the throat. The man had been bitten on the hand by a mad dog six months before. Three of his companions, who were bitten at the same time, had their wounds promptly cauterised, but the patient thought his too trifling to require attention. The spasms of the larynx and pharynx were extremely severe and painful, and the patient,

though suffering from burning thirst, could not bear the sight of liquids. Dr. Fubini brushed the pharynx with a one in twenty solution of hydrochlorate of cocaine, with the result that the spasm almost immediately ceased, and the man was able to drink without the least difficulty. There can be no doubt that the case was really one of hydrophobia; all the classical symptoms of the disease were present, and subdural inoculations of the patient's medulla in rabbits produced well-marked rabies in those animals. The case shows the value of immediate cauterisation of bites, as well as the utility of cocaine in relieving symptoms.—*British Med. Jour.*

Professional Certificate Signers. One often wonders where all the doctors come from who sign certificates of proprietary and secret remedies. An item in the papers shows the residence and methods of one of this class. Dr. Willard H. Morse, an alleged chemical expert of Westfield, N. J., sold his so-called analyses for ten dollars and upward. He was recently arrested by Anthony Comstock's society for fraudulent use of the mails. He confessed everything, and pleaded ignorance of the law in extenuation. He scanned the medical and pharmacal journals, and when a new advertisement appeared he sent the manufacturer a very critical analysis to insure payment for a laudatory one.—*Med. Record.*

The Catskill Mountains as a Health Resort.—It would seem, from certain indications of the past summer, that the pre-eminence which the Adirondacks have so long enjoyed in this part of the country as a resort for invalids is at least to be contested by the Catskills. Individual capital and enterprise have laid open the heart of the Catskills to New Yorkers, so that an invalid can leave the city in a parlor-car and reach an altitude of twenty-five hundred feet in five hours without change. Business men have not been slow to take advantage of this condition and to prepare the way for the crowds of visitors who are availing themselves of these facilities.

In climatic advantage there seems little choice between the two regions. The altitude is about the same, and, with the exception of the lakes, the country is the same. Should it be proved that the air is equally good for invalids—and of this there seems to be no doubt—then the newer resort will have greatly the advantage, for the ability to reach it from New York by a five-hour ride in a parlor-car is an advantage which the Adirondacks will never overcome.

It seems strange that this nearest considerable altitude to such great cities as New York and Philadelphia should so long have remained practically unknown to the seekers after health and rest. We do not refer to the old Mountain House or the newer Kaaterskill — immense white caravansaries filled with the noise and bustle of a summer hotel—but to the quiet, little-visited regions in the heart of the mountains, back an easy driving distance from the Hudson; regions where the bear and fox are so plentiful that a beautiful little inn, built for the Onteora Club, has been named from them "The Bear and Fox." Here the highest temperature recorded during the past summer was 86°, and that only for a few hours one morning. On the warmest days the man who leaves his newspaper on his piazza has to look for it where the breeze may have deposited it; and, as the evening comes on, he seeks the cheerful warmth of the log fire.

Whatever comfort the sick or the overworked can derive from a high mountain region, plenty of game, pure spring water, no sewers, absolute quiet, a table equal to Delmonico's, beautiful drives, unsurpassed views, and immediate communication by rail and telegraph with two great cities, is now to be had in this region. We predict its rapid development.—*N. Y. Med. Journal.*

The Influence of Bromide of Potassium on the Elimination of Urea.—Dr. Cesare Agostini reports, in *Lo Sperimentale* for May, 1888, a number of experiments made to determine the effect upon the excretion of urea of

bromide of potassium given in varying doses, and comes to the following conclusions: 1. Bromide of potassium slows organic metabolism, as is evidenced by the diminished elimination of urea which takes place during its administration. 2. Such diminution is not, however, proportionate to the size of the dose prescribed. 3. After prolonged use the organism becomes tolerant of the drug, and this effect is no longer observed. 4. But this tolerance diminishes or disappears upon the discontinuance of the bromide. The author believes that large and continued doses of bromide of potassium are compatible with perfect health, and that the emaciation and anæmia sometimes observed to follow its administration are due solely to the local action of the drug upon the digestive organs, and not to any permanent effect upon metabolism.—*Med. Record.*

Physiological Action of Iron.—In a preliminary note in the *Vratch*, No. 29, 1888, p. 561, Dr. Skvortzoff publishes the results of experiments on dogs, carried out by him in Professor L. J. Tümas's Pharmacological Laboratory, in Warsaw, with the view of determining the action of iron on nitrogenous metabolism in a healthy organism. The following are his conclusions: 1. Iron has no marked influence on the nitrogenous metamorphosis in a healthy system. 2. On the internal administration of iron in daily doses over 0.02 or 0.03 gramme, the assimilation of the nitrogenous ingredients of food decreases, thought but slightly (from 98.4 per cent. before the experiment to 97.0 per cent. during it). 3. After venesection the assimilation somewhat increases, both on the administration of iron and without it. 4. On the administration of iron with food after venesection, the restoration of hæmoglobin proceeds more rapidly than without iron. 5. The same holds true in regard to the body's weight.—*British Medical Journal.*

To Limit Marriage.—A very curious and suggestive bill has been introduced into the Legislature of Kentucky, which prohibits marriage with an idiot, lunatic, pauper, vagrant, tramp, gambler, felon, or any person rendered physically helpless or unfit for the marriage relation, or any person with a violent temper, or who has, within one year, been a frequarter of any immoral house.—*The Quarterly Journal of Inebriety.—Pittsburgh Med. Review.*

Erysipelas and Tuberculosis.—As the result of experiments, M. Solles concludes that erysipelas retards the evolution of experimental tuberculosis in the guinea-pig; the animal may survive twice as long as when erysipelas is not produced in them. This survival is all the more remarkable since experimental tuberculisation in the guinea-pig causes a general tuberculosis, which is much more rapid and much more serious than human pulmonary phthisis. The antituberculous action of erysipelas is double: it has a general influence, as shown by the prolongation of life; and it has a local influence limited to the erysiplelatous area, causing the induration, ulceration, and lymphatic swelling due to the tublercle to disappear. This localised action, clearly antagonistic to tubercle, is of such a nature, argues M. Solles, as to encourage the search after some parasite which shall have the power of destroying the bacillus tuberculosis.—*Lancet.*

College of Medicine for the Chinese, Hong Kong.—It is very gratifying to be able to report the beginning of regular medical education, or rather examinations, in China and for the Chinese. The first professional examination of the College of Medicine for the Chinese, Hong Kong, was held during second week in August. The subjects of examination were botany, chemistry, physics, elementary anatomy, elementary physiology, materia medicu (first examination), and clinical observations. The written examinations extended over four days; and the *vivâ voca* examination, held in the City Hall, was open to the public. Twelve students presented themselves for examination, of whom seven passed. Two scholarships, of the valve of sixty dollars a year, were awarded to the first students on the list.

Peritonitis caused by Round Worms.—Surgeon-Major R. D. Murray, of the Indian Medical Service, reports three cases of this kind. As the result of his observations in India he has no doubt that the round worm (ascaris lumbricoides) is capable of causing perforation of the bowel, and actually boring its way into the peritoneal cavity. These entozoa are very prevalent in Eastern countries and among the dark races generally, and the mortality caused by them is probably greater than is generally supposed. Surgeon-Major Murray says that in times of cholera they are frequently a predisposing cause of the disease.—*The Journal.*

Pseudo-ulcers of the Tongue.—Velpeau has already described imaginary tumors of the female breast as a special class not to be operated upon; they consist in somewhat hard and sensitive lobules of the gland and intercostal neuralgias, with localized pains in the gland. Verneuil (*Bulletin de l'Académie de Médecine de Paris*, Séance du September, 1887) makes a similar classification of certain ulcers of the tongue: painfulness and a pseudo-ulcer depressing the spiritus of the patient are the factors. The author has seen five such cases, which resemble one another. They are pure lingual neuralgias; a true ulcer is not to be discovered; a psychical condition seems to predispose to the disease. Three causes may be assumed, the arthritic diathesis, false teeth, and tabes. The prognosis as to life is favorable, as to longevity unfavorable. Bromide of potassium and moral treatment are most effective.—*Medicin. Chirurg. Rundschau*, August 1.—*Med. News.*

Painless Tooth Extraction.—Drs. Hénoque and Frédel, in a communication made to the Biological Society of Paris, state that the extraction of a tooth may be rendered painless by spraying the neighborhood of the external ear with ether. The anæsthesia of the trigeminus so produced extends to the dental nerves, and thus renders the production of general anæsthesia needless. *Med. Record.*

Obituary.

GEORGE W. WEST, M.D.

Dr. George W. West, the subject of this notice, died at his residence near Petersville, Frederick Co., Md., on the 18th of August, 1888, at the ripe age of 86 years. Though a man of most quiet and reserved nature and therefore not widely know in professional circles, Dr. West belonged to that class of eminently skilful and learned practitioners who expend their best efforts in the active work of their profession and place little on record which will widen their fame and reputation beyond the limits of the communities in which they work. For sixty-four years Dr. West was engaged in the active and continuous practice of medicine and he only surrendered this work when stricken with the illness which terminated his life. During all of this time he kept fully abreast with the progress of his profession and applied its resources to the needs of his patients with skill, rare good judgment and eminent success. He was possessed of a liberal education; his mind was broad and novel in its grasp and wise in its deductions. Had he chosen to work in a broader field and with more pretentions surroundings his labor would have brought larger results and wider fame; but the character and nobility of the man would have been no more faithfully illustrated than in the life he has led. He was devoid of those aspirations which tempt men to erect monuments for themselves out of work which may have only an ephemeral value. The simple ambition to do well the task before him, to subserve the demands of a rural community and to apply the art and science of medicine with care, zeal and fidelity were the motive forces behind his life's work. In every relation of life his character was exhibited with courage, simplicity and gentleness. The elements of his nature were eminently noble, just and chivalric. The universal esteem with which his memory is held in the community in which he practised his profession for over three score years is a monument of which his surviving relatives may feel justly proud.

Medical Items.

Dr. Thos. W. Kay has removed from Beirut, Syria, to this city.

Dr. Alex. L. Hodgdon has removed from Farmwell, Va., to this city.

Dr. F. E. Chatard died suddenly at his residence on Park Avenue, Thursday afternoon in the 84th year of his age.

The American Academy of Medicine will hold its annual meeting in New York City on November 13th, and 14th, 1888.

The twenty universities of Germany conferred the degree of Doctor of Medicine on 847 candidates in 1886-87, as against 689 in 1885-86.

Creuse's tasteless tincture of iron is made by adding about 200 grains of the citrate of potassium to one ounce of the tincture of the chloride of iron.

Medical Incomes in Kansas City.—A certain prominent physician of Kansas City asserts that he is making $20.000 a year, cash, from his practice. What was the name of Sapphira's husband?—*Medical Record.*

Blue-lined writing-paper is almost universally manufactured both in this country and Europe. The School Commissioners at Mainz have, upon medical advice, decided that the blue lines are bad for the eyes, and ordered that all school writing-paper shall be ruled in black.—*Medical Record.*

When *iodine or iodides* are to be administered for a long time, certain precautions must be observed to prevent iodism, as occasional intermission of the drug, the use of eliminants, as large draughts of water, or combined with such drugs as atropine. (Bartholow.).—*Col. and Clin. Record.*

Among the papers in the October number of the Virginia Medical Monthly is one on "The Value of the Hypophosphites in the Treatment of Phthisis Pulmonalis. Although classed among the "Original Articles," it reads very much like the advertisement of a Richmond drug firm.

Sir Wm. MacCormac's address to the Medical Society of London on Laparotomy in the Treatment of Intra-peritoneal Injuries has been translated into German by Professor Volkmann's assistant, Dr. Thamhayn, and has been issued as one of the well-known series of *Klin. Vorträge.* This is a signal testimony to the value of the address.—*Lancet.*

A new antiseptic soap is coming into use in some of the London hospitals, containing from 1 to 3 per cent. of biniodide of mercury (rendered permanently soluble by the presence of a little iodide of potassium). It is found to be a more powerful antiseptic microbicide than any hitherto known.—*London Corr. of the Journal.*

Prof. Da Costa prescribed for a case of *chronic gastritis* due to excessive use of alcohol, accompanied by morning vomiting, pain in epigastrium and flatulency:—

℞. Zinci oxidi, gr. ij.
Ext. belladonnæ, gr. $\frac{1}{16}$.
Ft. pil. j. M.

Sig—One three times a day.—*Col. and Clin. Record.*

The first Congress of Italian Medicine, in which consultants and practitioners will meet with clinical teachers of the various schools for friendly communication and discussion, will assemble in Rome on the 15th, 16th, 17th, and 18th of October. Already an influential array of names of intending participants, it is hoped, will prove as advantageous for Italy as the corresponding Congresses which have had their seat at Wiesbaden have been for Germany.—*Lancet.*

Prof. Bartholow recommends the iodides as among the best remedies for beginning *cirrhosis*, often adding arsenic to the preparation, whereby the efficiency of the iodide is increased:—

℞. Ammon. iodidi, ℥j
Liq. potas. arsenitis, f℥ss
Tinct. colombæ, f℥ss
Aquæ, f℥iss. M.

Sig.—One teaspoonful three times a day, before meals.—*Col. and Clin. Record.*

Building in Berlin.—According to Building, the new law in Berlin is very strict: "No building can occupy more than two-thirds of the ground, nor be higher than the width of the street. None can be occupied as a dwelling until six months after it is built, and the number of persons to be permitted in each sleeping room is to be prescribed by the sanitary inspectors by the rule of so many cubic feet of space for each person. No unventilated or unlighted room is allowed to be used for personal occupation. Severe penalties are exacted for violation or neglect of the rules."

What an almost universal vaccination of a people can do in diminishing the small-pox death rate is shown by recent statistics for the German Empire, in which the practice of vaccination and re-vaccination is compulsory. For the year 1886, the small-pox death-rate for the whole empire was only .03 to each 100,000 of the population. In the larger cities it ranged from .07 in Berlin, to 3.6 in Hamburg. Compared with the German cities, the rates in other European cities ranged from .06 in London to 4.9 in Liverpool; Paris, 9.0; Brussels, 11.4; St. Petersburg, 15.3; Moscow, 34.1; Vienna, 26.2; Venice, 51.6; Rome, 134.3; Genoa, 153.8; Budapest, 368.7; Marseilles, 545.3; to the 100,000. More than two-thirds of the deaths from small-pox in Germany were in cities like Hamburg, which have a large foreign shipping trade, and in those districts which lie immediately along the Russian and Austrian borders.—*Boston Medical and Surgical Journal.*

Original Articles.

PROGRESS OF MEDICAL EDUCATION, AND THE IMPORTANCE OF THE STUDY OF THE PHYSICAL SCIENCES IN RELATION THERETO, DURING SCHOOL LIFE.*

BY BENJ. BLACKFORD, M.D., LYNCHBURG, VA.

Fellows of the Med. Society of Virginia:

It is proper that we should be impressed with feelings of profound gratitude to the great Ruler of the Universe, that we are again permitted to assemble for the purpose of social and scientific intercourse. Custom has made it a duty for the presiding officer of this Society, to deliver an address at the opening of each annual session. As the opportunity is one to be prized, I hope, with your indulgence, to meet the requirements of the occasion. I can only throw myself upon your kindness and forbearance, and with your help hope so to give direction to our proceedings that a fair and full expression of the views of every member may have its full weight and influence. However short I may come in accomplishing this desirable object, and in performing these duties in a satisfactory manner, I must still claim an unsurpassed interest in, and a devotion to, the great ends for which the Virginia State Medical Society has been organized.

It is indeed a gratifying spectacle to see in this hospitable and beautiful "City by the Sea" of our beloved old Commonwealth, assembled for the second time, representative medical men, not only from every section of our own State, but from our sister States, brought together in medical council, prompted solely by a desire to promote the general good of the profession.

This Society has had a prosperous existence of nineteen years, and it is a source of congratulation to us all, that it has developed into great usefulness and benefit to the profession of our State. The world has not stood still; all departments of human knowledge have, perhaps, been advanced more rapidly than during any other equal length of time. Impressed with these ideas, I have thought, in selecting the subject for your consideration upon this occasion, of addressing myself more particularly to the progress of medical education and the importance of the study of the physical sciences in relation thereto, during school life; concerning which, more interest is now evinced by the profession generally throughout the country than ever before, and I know of no more interesting subject at this time, to call your attention to, although I am well aware, that my distinguished predecessors, have, in their annual addresses, gleaned the fields of inviting inquiry, and have so carefully garnered the gems of medical thought, and spoken such earnest words of counsel and encouragement, as to render it difficult to select fresh topics, or improve upon their suggestions and admonitions.

DEVELOPMENT OF SCIENTIFIC INQUIRY.

It must be admitted by all that progress is the order of the day—he who does not constantly keep adding to his knowledge, and increasing his resources, must soon fall behind the more enterprising and better informed of his contemporaries. The physician who does not know that the community in which he lives is keeping a constant watch upon him, and contrasting his knowledge, skill and success in his profession with those of the best and most successful medical men within the range of their reading or acquaintance, shuts his eyes to an important fact of paramount interest to himself. The present age is essentially characterized by its intellectual activity. It has become a recognized truth that, at no previous period, have mental energy and zeal been displayed to the extent which now prevails. In every department of mechanical art, the scale and scope of progress are as vast as its character and attributes are substantial and solid. Nor, again, does the advancement of the sciences, upon the successful application of which the perfection

*President's Address delivered Oct. 24, 1888, before the Medical Society of Virginia at its 19th Annual Session held at Norfolk, Va., October 23, 24 and 25, 1888.

of mechanical art depends, proceed more slowly; it is to new applications or combinations of scientific principles established by our predecessors that the existing state of progress of that art is due. It is to striking novelties (especially in chemistry and in physics) worked out by philosophers of the present day, and to the ready appropriation of inferences deducible from those discoveries, that the present marvellous perfection of the arts is due—the advance of one is about a consequence of the growing perfection of the other. This is indeed so self-evident a truth, the connection between improvements in science and advance of practical art grows so obvious and so great a fact, and worldly interests are felt to be so directly promoted by the general dissemination of sound scientific doctrines, that a peculiar social influence begins to manifest itself as the sure result; men, whose positions and avocations are utterly unconnected with the pursuits of physical science—who have been led by the tone of their education to look upon such pursuits with a feeling savoring, rather of lofty disdain than of inquiring interest—these men now venture not only to exhibit a solicitude in the well-being of those pursuits, but even engage in measures designed to further their advancement. Chemistry has, in fact, of late years, attained in this manner, what may be termed a distinguished social position; chemistry and general physics, the whilom objects of general indifference are now tenderly fostered; they are felt to be among the means to that which, with the mass of mankind, ranks as the great end of existence—wealth. For these reasons the fact of the prosperous state of the sciences in question is familiar to the world.

But while all this activity is displayed in connection with those sciences; while clear and obvious practical good is derived from their advance, does the spirit of the age withhold its influence from others, less attractive in their outward nature—less obviously prominent and brilliant in their immediate ascertainable results? Has, for example, that science-art (medicine), to the pursuit of which *we* are devoted, stood still, while its kindred of the great family of knowledge have strode on with giant's pace? Shall we conclude that because charlatanical devices spring up, and continue (as they will probably ever continue) to attract the heedless multitude by their cunning delusions, that the teachers of legitimate science have deen idle? No; I answer. There is, in truth, no branch of knowledge which, in the conviction of those who are capable of judging, has of late years made advance more rapid and more solid than medicine. In acquaintance with the intimate phenomena of diseased processes and products *we*, of the present day, have vastly outstripped our immediate predecessors; in the facility with which we recognize the existence, and in the accuracy with which we define the characters of maladies during life, we are incomparably their superiors; in the great object of our art—that of mitigating the sufferings and controlling the ravages of disease—our capabilities have notoriously become increased and invigorated. But, above all, we have the proof that our slow and steady labor tells in the grand truth that the mean duration of human existence is on the increase. The influence of modern medical science in prolonging life at its advanced periods cannot now be precisely estimated. It is yet young—scarcely half a century old. That it will be great, I do not doubt. It has already almost abolished pain, and by that fact alone has ministered to the prolongation of life.

ABANDONMENT OF "EXCLUSIVE SYSTEMS."

One of the chief and most efficient causes of the wonderful progress of modern medical science, I believe to be none other than the virtual abandonment of all "exclusive systems," or codes of general theory. Since the first hour when men unacquainted with the value, or shrinking from the toil of severe observation and induction, yielded to the easy pleasure of fabricating *a priori* doctrines of disease, until within comparatively a few years, "systems upon systems" have followed each other in endless succession. Each has fretted its hour upon the stage, and been in turn set aside as some

phantasy more charming than its predecessors, either from its simplicity, or from the enthusiasm with which it may have been set forth, captivating the imaginations of men.

Some of you, gentlemen, can perhaps remember when our profession had to run the gauntlet of these "exclusive systems;" others of us have, in military parlance, only been thrown upon the "skirmish line," while all of us, under the teachings of modern medicine, have been forced back upon the "reserve line" of observation of nature. Rejoice, then, gentlemen; I speak more particularly to the younger members of the profession, that the day of "exclusive systems" has, practically speaking, passed by. Rejoice, that we are neither "pneumatists," nor "archaists," nor "animists," nor "vitalists," nor "solidists," nor "humoralists," nor "Broussaisians," &c. Rejoice that, instead of all this, our boast is to be simple observers of nature, who seek by patient and close investigation to ascertain, in all their phases and attributes, the facts of our science.

All "exclusive systems" carry with them one invariable principle of evil, opposed to all true progress in knowledge. Is it possible that true knowledge could flourish under influences so calculated to repress the efforts of original observant power? While it flourished, advance was impossible.

PROGRESS OF MEDICAL EDUCATION AND PHYSICAL SCIENCE.

The system of medical education, not only in this country, but in England and on the continent of Europe, has undergone wonderful changes and improvements. Until within a few years, the whole public instruction of the student was limited to an annual four-month's course of lectures, and the number of instructors nearly in every school corresponded to the six or eight general departments into which medicine had been divided for a century or more. During the rest of the year he was left to manage his own education as he chose, and at the end of three years, (a period of probation which was only nominally required by certain Faculties) if he could pass a ridiculously easy examination in a certain proportion of these departments, he got his degree of Doctor of Medicine. With this necessarily general groundwork of knowledge, and without any proper clinical or special training, he went out into the world, either to make himself by observation, reading and natural shrewdness, the really excellent, practical family physician, such as nearly every village in this State may boast of, or to remain through life a very ignorant and cheap doctor. The few who fortunately had the means, went at once, after graduating, to famous European schools, where medicine seemed a strange, almost a new science to them, and where years might be spent in learning what was there taught in but a single sub-division of one of the old general departments. This, I believe, was the usual *curriculum* of most of the medical schools of this country, which is doubtless familiar to many of the older members of this Society.

Does not the progress of the physical sciences require a "new deal" in the system of medical education, not only by a few, but by all the medical institutions of the United States? And should not the profession at large demand, for the sake of the rising generations of medical men, that the early training of young men must comprise all that is comprehended under the common term of a "liberal education?"

The medical student, before commencing the study of his art, must be grounded in those branches of knowledge—literary and scientific—which are considered necessary to all well educated men. To this ideal of the early training of a medical student, comprising something more than what would enable him to take a degree in Arts—a standard which some may think too high, but to which all will, at least, do well to aspire,—something yet must be added before we can hope to perfect the modern system of medical education. During the three years the student finds too often that he has too much to learn. He has to cram into his head about a dozen new sciences of which he had not previously mastered

the rudiments, with a vast amount of unfamiliar lore hanging on the skirts of these sciences, or mixed up with them. By the aid of a retentive memory, he may be enabled to keep hold of all these facts and reasoning for a while, just long enough, perhaps, to qualify him to pass the examinations, which he looks upon as a necessary but almost intolerable evil. Emerging from the presence of the Faculty, which has dubbed him M. D., he shakes himself with a delightful feeling of new-found ease, and forgets, as soon as may be, three-fourths of what he has been taught; that a period of life at which habits have become inveterate, ideas are formed, and the mind is stored already with almost as much as it can hold, is scarcely fitted for the assimilation of this vast amount of fresh knowledge, and that the true method of education consists in the gradual training, inasmuch as what is quickly gained is quickly lost.

As the progress of physical science adds day by day and year by year to that large mass of information which the practitioner of medicine has to acquire, it becomes more and more important for the student either to extend his period of education, or, at any rate, so to arrange his studies and to economize his time, as to compensate for these increasing requirements. Above all, he must be increasingly zealous and watchful, lest, in grasping at accomplishments, he loses essentials. Is there any practitioner here who cannot from his own reminiscences of student life, recall various instances of this kind? Is there any medical college, the annals of which, if laid open, would not exhibit the lamentable shipwreck of many a student who begun full of hope and resolve and promise, but whose intentions melted away under the bewilderment produced by the magnitude and complexity of his task?

The question of the modification of the system of medical education, has been freely discussed by the most eminent men of our profession; not only before the National Medical Association, almost at every annual meeting, but before the different State Societies. At the last meeting of the National Medical Association held in Cincinnatti, the worthy President, the late Dr. A. Y. P. Garnett, of Washington city, called attention in a direct and forcible manner, to the present defects in our methods of education, and the necessities for increasing the standard of requirements, and of reducing the number of medical schools; urging the passage of a law making it obligatory that, in the future, charters for creating medical schools shall contain a clause to the effect that a full term of four years study shall be requisite before the granting of a diploma to any student, and that no student shall be matriculated who has not passed an oral and written examination in the ordinary branches of academic study; he also urged the establishment of Boards of Medical Examiners in each State and Territory, which shall have no connection with any medical schools, and which shall be required to examine all applicants for license to practice medicine in their respective States. Everything he said is absolutely true and cannot be told too often, and it behooves the profession at large to cooperate with the National Association as well as the State Societies in their efforts in advocating the teaching of the young boys at school not only the classics but the rudiments of those sciences which are generally reserved for the man of full age. They should be, in their early training, instructed in the sciences of Botany, Physiology, Chemistry and Natural History. It would be just as easy to teach them to an intelligent boy, whose mind is plastic and eminently capable of receiving and retaining impressions, as to a man past the age of eighteen or twenty. One who can be taught to read the dead languages as fluently as English, can surely be instructed in the varying construction and special characters of living beings, vegetable and animal. It would immensely simplify the labor of medical teachers, if the young men who come to their schools were already versed in Chemistry, Botany, Natural History and Physiology.

OPINIONS OF DISTINGUISHED TEACHERS.

That eminent and distinguished professor of Physiology, Dr. J. L. Cabell, of

the University of Virginia, who has for half a century "worn the harness" of an instructor of medical students, in his address as President of the Society, at the annual meeting held in Petersburg in 1877, in speaking of the utter ignorance on the part of most persons, even those who are otherwise well educated, of the just claims of medicine to be regarded as one of the positive sciences, said: "A possible remedy for this might be found in properly directed efforts to instil into the minds of the educated classes more rational views as to the nature of vital phenomena, by including in the curriculum of our schools and colleges, the study of the elements of Physiology and Sanitary Science." These views he had long entertained, and had expressed them in his lectures to his classes for a number of years. Every teacher in a medical school cannot have failed to perceive the immense advantage which is possessed by the pupils who have been trained in even the rudiments of the physical sciences over those who have never studied them before entering upon their medical studies.

In this connection, I desire to call your attention to an extract from an interesting address, delivered by Prof. Huxley, at the annual distribution of prizes, at St. Mary's Hospital, several years ago—"On the Relation of Physical Science to Medical Education." He defined the "object of the science of medicine as being to ascertain the nature of the disability which a diseased person labors under, and the means by which that disability can be removed; and, correlatively, the art of medicine as the skilful use of all those means by which we can ascertain what is the matter with the diseased man, and their application to his cure. One great division of these means was derived from, or in its use dependent upon, the physical sciences. The microscope, the ophthalmoscope, the laryngoscope, the stethoscope, chemical tests, and the other great and familiar means of diagnosis, were all physical appliances. Further than that, every liberally educated medical man should surely know something about the nature of the bodies he is constantly employing. He should certainly, as a man of liberal education, know enough of Botany and Zoology to be on even terms with laymen, and give safe answers concerning the animal and vegetable substances which he uses constantly. He was quite prepared to admit, and indeed had always had a strong conviction, that there was something absolutely preposterous in the volume and bulk to which, for example, some of our treaties on *materia medica* extend, and the enormous quantity of absolutely irrevelant matter: he was not one who would take the student through the length and breadth of physical optics because there are particular substances used in medicine which change the polarization of light, or exhibit the phenomenon of fluorescence.

But there was a more important aspect of the matter—the relation in which the science of medicine stands to physical science in general. The scientific man makes use of the data of physical science for the purpose of reasoning out the exact conditions of the case which he has before him, and for the purpose of applying the precise measures which are adapted to meet the case. Having this conception of what is meant by scientific medicine, what has to be done in medicine before we shall reach this condition? For although, looking about us to surgical practice particularly, and perhaps in some few cases in medicine, it would be possible to adduce instances of what he should call perfect medical science, that is to say, when you have a complete knowledge of the lesion, and a complete knowledge of the conditions required to restore that lesion, yet these were among the rare cases presented to the physician or surgeon, and in the majority of cases we had no such complete knowledge.

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"We must look forward to the physician attaining as clear a mental vision of the condition of the diseased part, and the means of relieving, as the surgeon has in the plainest kind of surgery. What the physician wants is more light. He wants a better light upon the arena of the fight, so that he may be able to remove the obstacles out of the way of nature, and may be able, as occasion

offers, to deal her opponent a severe blow, without the chance of doing her an injury. That light must come from the cultivation and improvement and the refinement in every way of those sciences which furnish us with the data of deduction, the abstract physical sciences of Anatomy, Physiology, Chemistry, Physics, &c.

Upon a clear appreciation of this, all our theories of medical education must eventually turn. Let it be granted, then, as he believed it must be, that a thorough grounding in physical science was the basis of all medical education. How was this attainable? One of the most experienced surgeons in England had raised his voice against the immense indigestible mass of information crammed into the medical student now in the course of three years. Coming without a scintilla of a notion of anything about science, he was expected to learn Physics, Natural Philosophy, Chemistry, Botany, Zoology, Therapeutics, Medicine, Surgery, Dietetics, Jurisprudence. The thing was absurd. You make a sort of intellectual *foie gras* of him; but you could not give him information of the kind and scope which he ought to have in that time, and with the existing methods. They might be taught to pass examinations. He was going to say he would teach a dog to pass an examination, or at least nine-tenths of the examinations that men pass through; but they could not acquire a knowledge of the facts from their own observation, and the only knowledge that is of the smallest use. The practical and purely professional subjects alone must more than fully occupy every minute of the three years years of study. What, then, was the meaning in dwelling on the enormous importance of Physical Science to students of medicine? He held that all this acquaintance with the principles of Physics and Chemistry and Biology ought to have been acquired in the course of their general education. If those who regulate education in this country had the smallest conception of what their real duties were, or of what the purposes of mankind and the conditions of its progress at the present were, they would give that knowledge; and those who wish to improve medical education must, to his mind, throw themselves into that object; they must compel those who give us primary education to make physical science a very large constituent portion of that education

"It was the duty of every man to lift up his voice against the scandalous perversion of human time and human ability under the system of gerund grinding which now prevailed at schools. And, for one particular purpose of medical training, it was the duty of every one of us who had that course at heart to endeavor to exercise such an influence that the medical teacher shall not have to commence upon a mere *tabula rasa*, but the young men who come up for medical education shall have been accustomed to acquaint themselves with chemical formulas and chemical reactions, shall have learnt the great distinguishing features of the different forms of life, and the broad facts of physiology, the elementary outlines of which might—he spoke from experience—be taught perfectly well to boys of ten years old. How much easier the task would then be, not only for the learner, but for the teacher; and how vastly greater would be the stride made by every man towards that great goal already indicated—the establishment of scientific medicine."

These are words of truth and wisdom from one of the greatest intellects and most learned professors and scientists of the present age—one who knows whereof he speaks—and there cannot be a question as to the correctness of his views so forcibly expressed relating to the fundamental principles of education, and which should be taken into serious consideration, not only by the medical Faculties and profession of our own State and of the whole country, but by all who are interested in the subject of the general primary education of the youth of the land.

INFLUENCE OF THE COLLATERAL SCIENCES.

It is a subject of congratulation to all true lovers of our profession, that it has so developed its progressive energies as

to embrace within the scope of its recognized curriculum so large a proportion of the more useful of the collateral sciences. Happily such is the extension of the human mind into nature, that almost daily new regions are discovered, and the boundaries of the old are so extended as to require fresh sub-divisions in order to bring them within the domain of thought. Formerly the physician might have been able to comprehend all that then constituted the allied sciences of medicine, but that can never again be possible. His duty lies, therefore, in giving an exact and scientific character to the department which remains to him—to investigate its phenomena with that concentration which is necessary in any physical enquiry, and with all those aids which are afforded in increasing perfection by modern science.

It is not, however, to be overlooked, as *Sir William Gull* says, "that even science herself is apt to have her moments of dogmatism, and by throwing the light of some particular inquiry full in our eyes to blind us for the time to that which lies beyond. How often has medicine been thus diverted from her difficult path? A discovery in physics has made us for the moment no more than galvanic batteries, or a discovery in chemistry, at another, mere oxidising machines."

MODERNIZED EDUCATION AND MATERIALISM

There is one objection often felt to a "modernized education." Many excellent people are afraid of science as tending towards materialism. That such apprehension should exist is not surprising, for unfortunately there are writers speaking in the name of science, who have by their writings thought proper to foster it. It is true that among scientific men, as in other classes, crude views are to be met with as to the deeper things of Nature; but that the life-long belief of Newton, Faraday, and of Maxwell, are inconsistent with the scientific habit of mind, is surely a proposition which I need not discuss; and as *Professor Lord Rayleigh*, President of the "British Association for the Advancement of Science," said in a recent lecture: "Men who devote their lives to investigation, cultivate a love of truth for its own sake, and endeavor instinctively to clear up, and not, as is too often the object in business and politics, to obscure a difficult question. So far, the opinion of a scientific worker may have a special value, but I do not that he has a claim, superior to that of other educated men, to assume the attitude of a prophet. In his heart he knows that underneath the theories that he constructs there lie contradictions which he cannot reconcile. The higher mysteries of being, if penetrable at all by human intellect, require other weapons than those of calculation and experiment."

In these days of rapid scientific advancement, and still more of reckless scientific speculation, of skeptical enquiry and free thought, as it is well for us all now and again to pause and ask ourselves the question: Whither do our scientific investigations tend? Do they help to confirm, or are they subversive of the cardinal points of Christian belief? If the former, then we may be sure that our method of working is right, our science true, and the knowledge gained to the world will live as long as truth endureth. But if the latter, we may be equally sure that what we think we have discovered is no discovery at all, and will prove to be but the baseless fabric of a dream. We hear a good deal now a days, and some people seem to take a special delight in talking about the conflict between science and religion. Now, I am not one of those who believe that true science is or can be in any way or degree opposed, either in theory or in fact, to what is called Revelation. It has always appeared to me a simple impossibility that true science and Revelation should ever contradict each other. Speculative science, or perhaps, I ought rather to say, speculative thought, may, and very possibly will, be frequently at variance with revealed truth. But true science, real scientific thought, and most of all, the demonstrative facts, of science never have done, and never will do violence to the undoubted will of the Creator as exemplified in his revealed

word. Reason perhaps herself revolts from such a thought.

Without encroaching upon the grounds appertaining to the theologian and the philosopher, the domain of Natural Science is surely broad enough to satisfy the wildest ambition of its devotees. In science, a retrograde move ment is, from the nature of the case, almost impossible. Increasing knowledge brings with it increasing power, and, great as are the triumphs of the present century, we may well believe that they are but a foretaste of what discovery and invention have yet in store for mankind. Encouraged by the thought that our labors can not be thrown away, let us redouble our efforts in the noble struggle.

There is probably no human work which daily confers greater good upon society than does ours; and when we consider that from the ranks of our profession the chief cultivators of modern science have sprung, whether we speak of Chemistry, Botany, Physiology, Comparative Anatomy, Biology, or Hygiene, we may feel some justifiable pride and be encouraged in spite of all failures to go on, assured that our future must be one of ever increasing usefulness and honor.

CONCLUSION.

And of all this, gentlemen, in conclusion, what is the object, and what the end? None other than the discovery of truth, and the application of this truth to the relief of human suffering. Such are the aims of him who has entered in the practice of our science, and subsequently engages in the practice of our art. And can there be a nobler combination than that practice opens to our view—the intellect keenly laboring for the benefit of our fellow men, and the affections deeply sympathizing in the results of our labor? May not a class of men who are devoted to the task of warding off death, of shortening the career of disease, of assuaging physical anguish, and, (when art can avail no more) of smoothing the passage to the grave—may not this class of men legitimately lay claim to an elevated position in the social scale? And ought it not to be a high privilege to belong to a profession of which such is the exalted position? Is it not vividly inspiring? Ought it not, in itself, suffice to cheer us on amid toil, amid anguish, amid ingratitude, amid worldly struggles, to remember that by taking a position in its ranks we have acquired the power to think, to feel, to act for the accomplishment of things so great, that we have ensured for ourselves the enjoyment of pleasures so pure.

It is extremely gratifying to see so large a number of the younger members of the profession in Virginia, many of them recent graduates of the medical schools and licensed by passing the examination of the State Board, connecting themselves with, and taking such deep and lively interest in the proceedings, in the welfare and prosperity of our Medical Society—it augurs well for the future of the profession of our beloved old State. I hope I may be pardoned in presuming to say to the "young doctor," in all spirit of kindness and of brotherly love, that if his admission into the profession of medicine confer such privileges and supply such foundation for the nobler orders of happiness which I have alluded to, a return is looked for on the part of him who enters it. Of that profession he is required to bear himself as a worthy and high-minded member, and to maintain its dignity and elevate its position, as far as his individual character, conduct and acquirements can conduce to that end. He is called upon to cultivate his intellect to the full amount of his ability, and carry its powers to the utmost point. His bearing among those whose sufferings he is invited to relieve, should be mild, conciliatory and humane. Roughness of manner furnishes no evidence of knowledge; callousness, either real or affected, is not significant of skill; nor will blunt and coarse eccentricity of deportment promote the confidence or insure the regard of those who entrust their lives in his hands. His moral feeling and character should be of such high order as to hold him beyond the reach of malignity. The public expect this from him; and it is fitting and just

it should be so. He is the intimate friend of families; he is admitted into their privacy; he is constantly placed in situations of most delicate trust; secrets are confided to his keeping, which may be withheld from the nearest and dearest relatives. If deficient in a high and keen moral sense, how utterly unworthy is he of confidence so implicit and so varied?

Men, in youth, often fancy they know better than their seniors, but age generally gives experience, and you can scarcely imagine how much practical knowledge of medicine the "young doctor" can acquire by cultivating the friendship and professional intercourse of the intelligent and worthy "reverend seniors" of the profession.

Within the last year the ranks of the membership of our Society have been thinned by the death of some of our most distinguished members, some of whom commenced in early manhood, and had grown old in the science—Selden, Moore, Manson, Steele, Fairfax, Galt, have passed from time to eternity, leaving us glorious examples of the highest type of professional renown, distinguished alike for their illustrious attainments and unblemished characters as Christian gentlemen. Some of them, in the language of a distinguished predecessor, "lingered like morning stars, beyond their allotted time, to shed their bright light upon the coming morn of the profession." This experience must remind *us* that we, too, who form the connecting link between the organizers of this Society and the younger members of the profession of the State, are rapidly hastening on to the common lot of man. The lengthening shadows of the evening of life are fast gathering around us, as reminders of the noiseless, yet unfaltering, step of time. In view of this, we should look kindly on those who are pressing us in the onward race of life. Let us then give encouragement and support to the younger members of the profession, who must soon take our places in the efforts to sustain and promote its honor, dignity and usefulness of the profession. We can thus yield our places to the rising professional generation gracefully, not grudgingly knowing that it is in the course of nature, wisely ordered by the author of our existence.

I thank you, gentlemen, for the patient attention and courtesy you have been pleased to extend me, while delivering this address; and now, with the expression of the hope that this meeting of the Medical Society of Virginia will be one of marked success, both in the amount and character of the scientific work to be done—we will proceed to the regular order of business of the session.

At a Special Meeting of the Clinical Society of Maryland, held Friday, October 5th, 1888, the following resolutions were offered:

Whereas, The Clinical Socieiy of Maryland has learned with profound regret of the death of their late colleague, Prof. John S. Lynch, M. D.: Therefore

Resolved, That in the death of Prof. Lynch the medical profession has lost an active member, a learned practitioner and an able teacher, and the community a man well worthy of the love and trust universally reposed in him.

Resolved, That we place upon record the high esteem in which Prof. Lynch's personal qualities and professional attainments are held by this society.

Resolved, That the secretary be instructed to enter these resolution upon the minutes.

George H. Rohé,
Edmund R. Walker,
L. McLane Tiffany.

Dr. Woltering on Gluten Bread.—Dr. Woltering, of Münster, in Wurtemburg, writing in the *Allgemeine Medicinische Central-Zeitung,* strongly recommends the more extensive use of gluten as an article of diet, both on account of its extremely nutritive qualities and of its very low price. He shows, by means of tables of analyses, that pure gluten bread is some three times as nourishing as meat, and that bread made with the addition of 40 per cent. of gluten contains more albumen than hare or chicken of the best quality.—*Lancet.*

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BALTIMORE, OCTOBER 27, 1888.

Editorial.

THE PROGRESS OF MEDICAL EDUCATION.—As our numerous medical schools in the United States continue to grind out badly educated doctors of medicine who start at once, after leaving college, to practise on the unwary and attempt to earn a livelihood, the problem is forced upon many as to how to reduce this large number and make the medical graduate a man more worthy of his degree. Competition may do much good, but unfortunately in medical education it has done much harm. Schools vie with each other to turn out the largest number of students in order to fill the professorial pockets, thus prostituting a noble profession. A few thinking men have long since seen that a more careful education and stricter line of work would not only result in turning out better men, but also less of them. Spasmodic attempts are made here and there to create some reform in medical education but for the most part they are not genuine. Some men whether singly or in societies, do put forth honest attempts to raise the standard of medical education. The American Academy of Medicine, an institution, unfortunately, too little known and appreciated, has each year at its meetings endeavored to do some good in this direction; but so long as medical schools belong to private corporations and the members of these coporations have no further wish than to enrich themselves, work by any society will be of little avail.

However, it is always encouraging to see fresh attacks made on the subject of the progress of medical education and the speech of Dr. Benjamin Blackford delivered before the Virginia State Medical Society and published in this issue, is uttered by a man thoroughly in earnest and sincere. A proper preliminary education is the one principal thing important, so that work at medicine may include only that which is necessary. Rarely is stress laid upon the importance of an acquaintance with the languages. A knowledge of Latin and Greek to even a limited extent is of inestimable value, as those having this knowledge can readily testify; but aside from this the modern languages are by no means less important and yet how many medical graduates have not even a reading knowledge of French or German. However much good work may be done in England and America, and however many translations may be made, there is still so much hidden away in French, German and even Italian, that one unacquainted with these modern languages loses many opportunities of adding to knowledge.

An opinion has already been expressed in these columns as to what might be omitted from a medical course. Of course no one can remember all that he has learned, and only that used most frequently remains behind, while much is forgotten. That is why the recent graduate can more easily pass a given examination than his superior in age, who is probably his superior in experience. If by continued and repeated efforts an impression can be made on the profession, a time will undoubtedly come when each State will take the matter in hand (as a few States have already done) and exercising control over each medical school in its district will glean out by strict and honest examinations the wheat from the chaff.

An Operation to Increase the Usefulness of the Thumbless Hand. — "When the thumb is lost the human hand is reduced to a mere claw, which is of little use, either for taking large objects into its palm, or for seizing smaller objects with its finger-tips." With these words Dr. Lauenstein, in the *Dentsch Med. Woch*, July 26, 1888, introduces to us a new operation for the improvement of the hand thus maimed.

His attention was called to the subject by a case of extensive injury to the hand, in which the fractured little finger healed with a twist toward the thumb. A careful study of this case led him to believe that a very useful hand could be secured in this form of injury by cutting through, at the middle, the metacarpal bone of the index finger and also that of the little finger, rotating these fingers as far as possible toward the palm so that they might face each other, and letting them heal in this position. He had soon an opportunity to test this plan on a sailor in the hospital who had lost the left thumb as far as the metacarpus.

After severing the metacarpal bones of the index and little fingers with a chain-saw introduced through a very short incision along the dorsal surface, he bent these fingers at the first interphalangeal joint, and, forcibly rotating them toward the palm and toward each other, fixed them in this position by means of a suitable splint. Recovery followed without complications, and, at the date of the report, the index and little fingers of the still somewhat swollen hand were in such a position that, when bent, their tips met, and the patient could hold with considerable firmness small objects between them.

The rotation of the little finger was more successful than that of the index, but this was due to the hardening of the tissues resulting from the sailor's work. A hand in which the metacarpus of the thumb was lost would give better results, as the index finger could be better rotated. Dr. Lauenstein thinks that this operation, by its simplicity, demands further trial. It does not suit all cases, he says, but only those in which the patient has been doing, or wishes to do, delicate work with the hand, such as tailoring, watchmaking, goldsmith's work etc. The hand after operation is especially well adapted for holding the pen.

Miscellany.

At a Special Meeting of the Clinical Society of Maryland, held Friday, October 5th, 1888, the following resolutions were offered:

Whereas by Divine laws that pass man's understanding, our late fellow-member, Dr. Henry Rolando, has been taken from a sphere in which he gave every promise of success and usefuluess.

Resolved, That the Clinical Society of Maryland has lost a conscientious worker, each member who knew him a personal friend and the profession of the city a gentleman who, by his kindly, genial nature, won those brought into contact with him.

Resolved, That a copy of these resolutions be sent to his family and a copy be published in the Maryland Medical Journal and entered on the minutes of the Society.

Hiram Woods, M.D.,
Robert W. Johnson, M.D.,
Robert L. Randolph, M.D.,
Committee.

Neuralgia, Chloroform, and the Constant Current.—Marvellous results are claimed by Professor Adam-kiewics (Progrès Medical) from the combined action of chloroform and the constant current in facial and other forms of neuralgia. The electrode is made of hollow charcoal into which the chloroform is introduced, and from which the current sends it into the tissues. That this power of penetration may be thus obtained is thought to be shown in the fact that when chloroform is colored with gentian violet and applied in the manner described to the ear of a rabbit, the tissue becomes dyed. In experiments

with the human subject, the writer notes at the commencement the triple action of the constant current, the chloroform, and a condition of cataphoresis followed by a burning sensation and finally anæsthesia. Several remarkable cases of cure are cited. Anæsthesia is not obtained when the nerves are deep-seated, nor in sciatica.—*Medical and Surgical Reporter*, Feb. 18, 1888.—*Journal of Nervous and Mental Diseases.*

Aural Cases.—Mr. Deighton read notes of two cases. One in which a purulent discharge had existed for upwards of twenty years, and where there was almost complete loss of the membrana tympani. In this case, after the otorrhœa was cured, entire regeneration of the membrane took place. The second case was one of abscess in the mastoid cells, with high fever and delirium, in which perforation of the mastoid cells was performed with a successful result. Mr. Deighton remarked on the frequent fatal consequences of neglected ear disease, and insisted on the importance of a knowledge of at least the elements of otology by all medical men. This, he maintained, could only be obtained by it being made compulsory that all medical students should show a fair knowledge of aural disease before they are granted their diplomas. — *Transactions Cambridge Med. Society—Lancet.*

Medical Items.

An Intercolonial Medical Congress is to be held at Melbourne, is 1889.

Dr. William T. Lusk has been elected President of the New York State Medical Association.

The Italian Pediatric Association is the name of a new national medical society recently organized at Rome.

Dr. J. Mason Hundley of the city was married on Tuesday, October 23th, to Miss Helen M. Sweet.

It is rumored that Dr. Robert T. Wilson, of this city has been offered a chair in a prominent Chicago Medical School.

Ten cases of small-pox have been reported at Keswick, a small village in the northern part of York county, Ontario. The place has been quarantined.

The Congress for Criminal Anthropology holds its second annual session in Paris, August 1st to 8th, under the presidency of Professor Brouardel.

Sometimes an *infant's tongue* can be exposed to view by simply pressing the cheeks gently with thumb and finger. If neccessary, hold the nose for a moment and the tongue will come in sight. (Parvin.).—*Col. and Clin. Rec.*

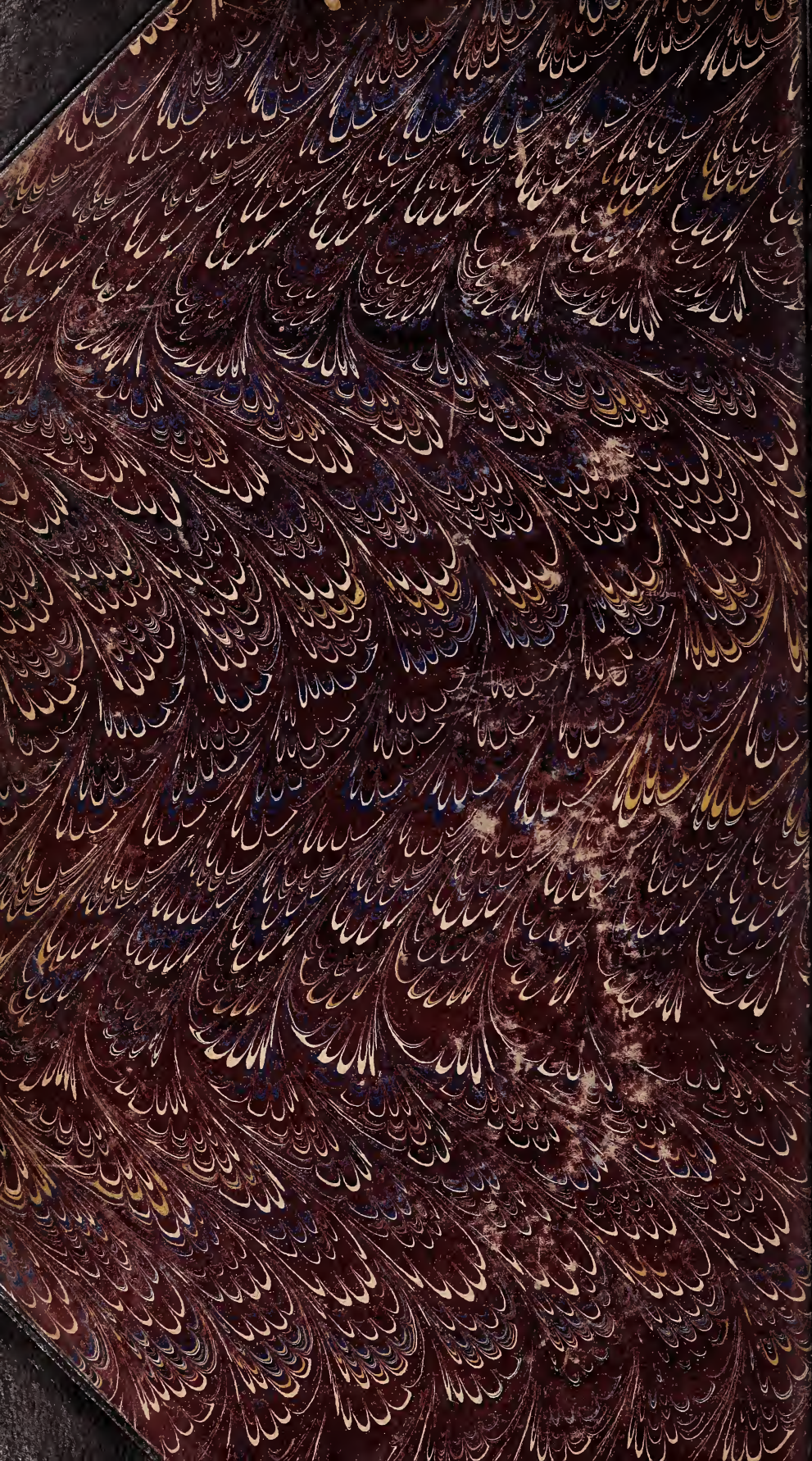
At a meeting of the Medical Society of the Woman's Medical College of Baltimore, held October 12th, 1888. the following officers were elected for the ensuing season :

President, Dr. India M. Cochel ; *Vice-President*, Dr. Ida C. Coler ; *Recording Secretary*, Dr. Marian A. Watson, *Corresponding Secretary*; Dr. Claribel Cone ; *Treasurer*, Dr. Hattie Frist.

The Society meets monthly and has fifty-six members.

The departmental government of Panama has just issued a very salutary decree, having for its object the regulation of the practice of medicine throughout the department. For years the isthmus particularly has been a veritable "quack paradise." Heavy fines or imprisonment are now provided for the first three offences of practising medicine, surgery, or pharmacy without being duly qualified, and the fourth offence is punishable by expulsion from the republic.

The sad death of Dr. F. R. Campbell of the Niagara University at Buffalo has recently been announced. As the author of that classical book, "The Language of Medicine," Dr. Campbell gave evidence of a rare ability and power, and as an advocate of higher medical education as well as a learned practitioner his loss will be deeply felt by all who knew him personally and through his writings. It is announced that Dr. Albert E. Persons has been appointed his successor as Professor of Materia Medica and Therapeutics in Niagara University.

In January 1889 there will be isssed from the press of A. L. Chatterton & Co., New York, a new quarterly, entitled The Journal of Ophthalmology, Otology and Laryngology.

It will be edited by Geo. S. Norton, M.D., assisted by Chas. Deady, M.D. Subscription price $3.00 per year. The journal will be devoted to original articles upon the three specialties and made of the highest practical value to all interested in the eye, ear or throat. In addition to original papers by prominent authorities the immense mass of material found at the New York Ophthalmological Hospital will be utilized.